WEBVTT

NOTE duration:"01:02:08"

NOTE recognizability:0.842

NOTE language:en-us

NOTE Confidence: 0.866716220526316

00:00:04.450 --> 00:00:05.682 So good afternoon everyone,

NOTE Confidence: 0.866716220526316

00:00:05.682 --> 00:00:07.530 and as usual I'll start with

NOTE Confidence: 0.866716220526316

00:00:07.590 --> 00:00:09.330 a few announcements before I

NOTE Confidence: 0.866716220526316

00:00:09.330 --> 00:00:10.722 introduce our speaker today.

NOTE Confidence: 0.866716220526316

00:00:10.730 --> 00:00:12.470 First, these sleep seminar lectures

NOTE Confidence: 0.866716220526316

00:00:12.470 --> 00:00:14.549 are available for credit when viewed

NOTE Confidence: 0.866716220526316

00:00:14.549 --> 00:00:16.516 in real time and to receive credit.

NOTE Confidence: 0.866716220526316

00:00:16.520 --> 00:00:19.264 Just text the ID for the lecture

NOTE Confidence: 0.866716220526316

00:00:19.264 --> 00:00:21.949 to Yale Cloud CME by 3:15 PM there

NOTE Confidence: 0.866716220526316

00:00:21.949 --> 00:00:23.263 will be information that shows up

NOTE Confidence: 0.866716220526316

00:00:23.263 --> 00:00:24.736 in the chat so you can see it.

NOTE Confidence: 0.866716220526316

00:00:24.740 --> 00:00:27.092 Then recordings of the lectures are

NOTE Confidence: 0.866716220526316

00:00:27.092 --> 00:00:29.889 available about two weeks after the lecture.

NOTE Confidence: 0.866716220526316

00:00:29.890 --> 00:00:32.236 There's no CME credit for recordings.

NOTE Confidence: 0.866716220526316

00:00:32.240 --> 00:00:34.060 If you have questions during the talk.

NOTE Confidence: 0.866716220526316

00:00:34.060 --> 00:00:34.912 Please use the chat.

NOTE Confidence: 0.866716220526316

00:00:34.912 --> 00:00:36.424 I will moderate the chat at the

NOTE Confidence: 0.866716220526316

00:00:36.424 --> 00:00:37.912 end so that way we can address all

NOTE Confidence: 0.866716220526316

00:00:37.912 --> 00:00:39.550 the questions and you'll have the

NOTE Confidence: 0.866716220526316

00:00:39.550 --> 00:00:40.950 opportunity to unmute yourself at

NOTE Confidence: 0.866716220526316

00:00:40.950 --> 00:00:42.528 the end as well and otherwise.

NOTE Confidence: 0.866716220526316

00:00:42.530 --> 00:00:44.670 Please keep your microphone muted,

NOTE Confidence: 0.866716220526316

00:00:44.670 --> 00:00:46.875 so now it's really my great pleasure

NOTE Confidence: 0.866716220526316

00:00:46.875 --> 00:00:48.657 to introduce today's sleep seminar

NOTE Confidence: 0.866716220526316

00:00:48.657 --> 00:00:50.205 speaker Doctor Amanda Piper.

NOTE Confidence: 0.866716220526316

00:00:50.210 --> 00:00:52.770 She joins us from Sydney where it is

NOTE Confidence: 0.866716220526316

00:00:52.770 --> 00:00:54.397 currently December 2nd and 6:00 AM,

NOTE Confidence: 0.866716220526316

00:00:54.400 --> 00:00:56.446 so that's amazing that she's here,

NOTE Confidence: 0.866716220526316

00:00:56.450 --> 00:00:58.406 and so we're thrilled for that.

NOTE Confidence: 0.866716220526316

00:00:58.410 --> 00:01:00.909 Doctor Piper is a team leader at

NOTE Confidence: 0.866716220526316

00:01:00.909 --> 00:01:02.412 Respiratory Support Service and

NOTE Confidence: 0.866716220526316

00:01:02.412 --> 00:01:04.247 home ventilation programs in the.

NOTE Confidence: 0.866716220526316

00:01:04.250 --> 00:01:06.175 Royal Prince Albert Alfred Hospital

NOTE Confidence: 0.866716220526316

00:01:06.175 --> 00:01:07.353 in Camperdown, Australia,

NOTE Confidence: 0.866716220526316

00:01:07.353 --> 00:01:08.965 and she's clinical associate

NOTE Confidence: 0.866716220526316

00:01:08.965 --> 00:01:10.980 professor at Central Clinical School,

NOTE Confidence: 0.866716220526316

00:01:10.980 --> 00:01:12.033 University of Sydney.

NOTE Confidence: 0.866716220526316

00:01:12.033 --> 00:01:13.788 Doctor Piper received her Bachelor

NOTE Confidence: 0.866716220526316

00:01:13.788 --> 00:01:15.626 of Applied Science and Physiotherapy

NOTE Confidence: 0.866716220526316

00:01:15.626 --> 00:01:17.431 at Cumberland College of Health

NOTE Confidence: 0.866716220526316

00:01:17.431 --> 00:01:19.308 Sciences at University of Sydney.

NOTE Confidence: 0.866716220526316

00:01:19.310 --> 00:01:22.173 her Master of Education at University of NSW,

NOTE Confidence: 0.866716220526316

00:01:22.173 --> 00:01:25.134 and her PhD in medicine at University

NOTE Confidence: 0.866716220526316

00:01:25.134 --> 00:01:25.980 of Sydney.

NOTE Confidence: 0.866716220526316

00:01:25.980 --> 00:01:28.234 Doctor Piper is considered one of the

NOTE Confidence: 0.866716220526316

00:01:28.234 --> 00:01:30.080 foremost clinicians in assessment and

NOTE Confidence: 0.866716220526316

00:01:30.080 --> 00:01:31.732 management of hypercapnic respiratory

NOTE Confidence: 0.866716220526316

00:01:31.732 --> 00:01:34.299 failure and non invasive ventilation use.

NOTE Confidence: 0.866716220526316

00:01:34.300 --> 00:01:36.484 She has an extensive publication record

NOTE Confidence: 0.866716220526316

00:01:36.484 --> 00:01:38.418 over 100 peer reviewed publications

NOTE Confidence: 0.866716220526316

00:01:38.418 --> 00:01:40.920 and book chapters on diverse topics

NOTE Confidence: 0.866716220526316

00:01:40.920 --> 00:01:43.170 related to respiratory muscle weakness,

NOTE Confidence: 0.866716220526316

00:01:43.170 --> 00:01:44.438 monitoring of sleep disordered

NOTE Confidence: 0.866716220526316

00:01:44.438 --> 00:01:46.771 breathing and the use of an Ivy

NOTE Confidence: 0.866716220526316

00:01:46.771 --> 00:01:48.259 in multiple clinical settings.

NOTE Confidence: 0.866716220526316

00:01:48.260 --> 00:01:50.468 She's been a keynote or guest

NOTE Confidence: 0.866716220526316

00:01:50.468 --> 00:01:51.940 speaker at multiple international

NOTE Confidence: 0.866716220526316

00:01:52.003 --> 00:01:54.385 and national meetings and she served

NOTE Confidence: 0.866716220526316

00:01:54.385 --> 00:01:55.973 on multiple clinical guideline.

NOTE Confidence: 0.866716220526316

00:01:55.980 --> 00:01:57.044 Writing groups,

NOTE Confidence: 0.866716220526316

00:01:57.044 --> 00:02:00.236 including most recently the ATS obesity

NOTE Confidence: 0.866716220526316

00:02:00.236 --> 00:02:02.344 hypoventilation guidelines and the ATS

NOTE Confidence: 0.866716220526316

00:02:02.344 --> 00:02:04.612 home in Ivy for stable CPT guidelines.

NOTE Confidence: 0.866716220526316

00:02:04.620 --> 00:02:05.980 She is an active educator.

NOTE Confidence: 0.866716220526316

00:02:05.980 --> 00:02:08.800 She's currently supervising 5 PhD

NOTE Confidence: 0.866716220526316

00:02:08.800 --> 00:02:11.620 students and two physiotherapy students.

NOTE Confidence: 0.866716220526316

00:02:11.620 --> 00:02:13.906 Her research centers on non invasive

NOTE Confidence: 0.866716220526316

00:02:13.906 --> 00:02:15.899 ventilation and other treatments in

NOTE Confidence: 0.866716220526316

00:02:15.899 --> 00:02:17.969 patients with chronic respiratory failure.

NOTE Confidence: 0.866716220526316

00:02:17.970 --> 00:02:20.294 She has been a primary or Co

NOTE Confidence: 0.866716220526316

00:02:20.294 --> 00:02:21.667 investigator in numerous clinical

NOTE Confidence: 0.866716220526316

00:02:21.667 --> 00:02:23.809 trials but just to name a few,

NOTE Confidence: 0.866716220526316

00:02:23.810 --> 00:02:25.395 the role of Don invasive

NOTE Confidence: 0.866716220526316

00:02:25.395 --> 00:02:26.346 ventilation in exercise.

NOTE Confidence: 0.866716220526316

00:02:26.350 --> 00:02:27.682 Training and rehab.

NOTE Confidence: 0.866716220526316

00:02:27.682 --> 00:02:29.458 Patients with chronic hypercapnic

NOTE Confidence: 0.866716220526316

00:02:29.458 --> 00:02:31.483 respiratory failure evaluation of different

NOTE Confidence: 0.866716220526316

00:02:31.483 --> 00:02:33.784 PAT modalities in the management of OHS.

NOTE Confidence: 0.866716220526316

00:02:33.784 --> 00:02:35.754 The effect of oxygen therapy

NOTE Confidence: 0.866716220526316

00:02:35.754 --> 00:02:37.330 on breathing in OHS,

NOTE Confidence: 0.866716220526316

00:02:37.330 --> 00:02:39.594 the use of NIV as an adjunct to

NOTE Confidence: 0.866716220526316

00:02:39.594 --> 00:02:40.810 secretion clearance in patients

NOTE Confidence: 0.866716220526316

00:02:40.810 --> 00:02:42.280 with Bronchiectasis and the use

NOTE Confidence: 0.866716220526316

00:02:42.280 --> 00:02:44.585 of an Ivy and oxygen in patients

NOTE Confidence: 0.866716220526316

00:02:44.585 --> 00:02:45.945 with motor neuron disease.

NOTE Confidence: 0.866716220526316

00:02:45.950 --> 00:02:46.728 In 2021,

NOTE Confidence: 0.866716220526316

00:02:46.728 --> 00:02:48.673 she received a very prestigious

NOTE Confidence: 0.866716220526316

00:02:48.673 --> 00:02:50.812 honorary member title to the

NOTE Confidence: 0.866716220526316

00:02:50.812 --> 00:02:52.168 European Respiratory Society,

NOTE Confidence: 0.866716220526316

00:02:52.170 --> 00:02:53.625 which is awarded to only

NOTE Confidence: 0.866716220526316

00:02:53.625 --> 00:02:54.789 two individuals per year.

NOTE Confidence: 0.866716220526316

00:02:54.790 --> 00:02:56.385 In recognition for both her

NOTE Confidence: 0.866716220526316

00:02:56.385 --> 00:02:58.326 pioneering work in the effective use

NOTE Confidence: 0.866716220526316

00:02:58.326 --> 00:03:00.060 of an Ivy and respiratory failure,

NOTE Confidence: 0.850646987272727

00:03:00.060 --> 00:03:01.956 and also in the wide dissemination

NOTE Confidence: 0.850646987272727

00:03:01.956 --> 00:03:03.800 of NID into clinical practice.

NOTE Confidence: 0.850646987272727

00:03:03.800 --> 00:03:06.008 So it's our distinct pleasure and

NOTE Confidence: 0.850646987272727

00:03:06.008 --> 00:03:08.154 honor to welcome Doctor Piper TL

NOTE Confidence: 0.850646987272727

00:03:08.154 --> 00:03:09.972 today to discuss in's and outs

NOTE Confidence: 0.850646987272727

00:03:09.972 --> 00:03:11.850 of home ventilation welcome.

NOTE Confidence: 0.905267984285714

00:03:12.560 --> 00:03:15.216 Oh, thank you so much Janet for the

NOTE Confidence: 0.905267984285714

00:03:15.216 --> 00:03:17.050 introduction and thank you everybody

NOTE Confidence: 0.905267984285714

00:03:17.050 --> 00:03:19.316 for for turning up and so good

NOTE Confidence: 0.905267984285714

00:03:19.316 --> 00:03:21.451 afternoon as you heard it is good

NOTE Confidence: 0.905267984285714

00:03:21.451 --> 00:03:23.908 morning for me just to begin with.

NOTE Confidence: 0.905267984285714

00:03:23.908 --> 00:03:26.380 I do have some financial disclosures.

NOTE Confidence: 0.905267984285714

00:03:26.380 --> 00:03:28.851 I have given talks for on behalf

NOTE Confidence: 0.905267984285714

00:03:28.851 --> 00:03:31.483 of Power Phillips in the last 12

NOTE Confidence: 0.905267984285714

00:03:31.483 --> 00:03:33.353 months and during the presentation

NOTE Confidence: 0.905267984285714

00:03:33.353 --> 00:03:35.662 you will see pictures of equipment

NOTE Confidence: 0.905267984285714

00:03:35.662 --> 00:03:38.314 from both Phillips and Res Med.

NOTE Confidence: 0.905267984285714

00:03:38.320 --> 00:03:40.260 They are the devices that

NOTE Confidence: 0.905267984285714

00:03:40.260 --> 00:03:42.082 we have most access to.

NOTE Confidence: 0.905267984285714

00:03:42.082 --> 00:03:43.386 Here in this country,

NOTE Confidence: 0.905267984285714

00:03:43.390 --> 00:03:46.423 and I think probably in the states as well.

NOTE Confidence: 0.905267984285714

00:03:46.430 --> 00:03:47.926 So as you heard,

NOTE Confidence: 0.905267984285714

00:03:47.926 --> 00:03:51.708 I'm from as Camperdown is a suburb of Sydney.

NOTE Confidence: 0.905267984285714

00:03:51.710 --> 00:03:53.894 This is a picture of the center

NOTE Confidence: 0.905267984285714

00:03:53.894 --> 00:03:56.739 of a Sydney and if you have a look

NOTE Confidence: 0.905267984285714

00:03:56.739 --> 00:03:58.964 that little red circle up in the

NOTE Confidence: 0.905267984285714

00:03:58.964 --> 00:04:00.920 left hand corner is our hospital

NOTE Confidence: 0.905267984285714

00:04:00.995 --> 00:04:02.927 Royal Prince Alfred Hospital.

NOTE Confidence: 0.905267984285714

00:04:02.930 --> 00:04:04.568 So this is another view of it.

NOTE Confidence: 0.905267984285714

00:04:04.570 --> 00:04:07.832 So here is our hospital in the

NOTE Confidence: 0.905267984285714

00:04:07.832 --> 00:04:09.956 middle top panel looking back.

NOTE Confidence: 0.905267984285714

00:04:09.956 --> 00:04:12.134 Seeing the city there and it's

NOTE Confidence: 0.905267984285714

00:04:12.134 --> 00:04:13.660 an interesting combination.

NOTE Confidence: 0.905267984285714

00:04:13.660 --> 00:04:18.012 A very old hospital built in the 1880s

NOTE Confidence: 0.905267984285714

00:04:18.012 --> 00:04:21.540 which is old for Australia and some very new,

NOTE Confidence: 0.905267984285714

00:04:21.540 --> 00:04:25.124 has a clinical services block and we are

NOTE Confidence: 0.905267984285714

00:04:25.124 --> 00:04:28.737 back on to the University of Sydney.

NOTE Confidence: 0.905267984285714

00:04:28.740 --> 00:04:31.316 So what I wanted to cover today

NOTE Confidence: 0.905267984285714

00:04:31.316 --> 00:04:34.177 is really just talk about what the

NOTE Confidence: 0.905267984285714

00:04:34.177 --> 00:04:36.679 goals of bilevel therapy are and

NOTE Confidence: 0.905267984285714

00:04:36.759 --> 00:04:38.380 really looking at it from sort of,

NOTE Confidence: 0.905267984285714

00:04:38.380 --> 00:04:38.912 you know,

NOTE Confidence: 0.905267984285714

00:04:38.912 --> 00:04:41.040 the in and out of how we should

NOTE Confidence: 0.905267984285714

00:04:41.108 --> 00:04:43.663 be managing or thinking about

NOTE Confidence: 0.905267984285714

00:04:43.663 --> 00:04:45.196 managing noninvasive ventilation.

NOTE Confidence: 0.905267984285714

00:04:45.200 --> 00:04:47.918 So I'm going to primarily concentrate

NOTE Confidence: 0.905267984285714

00:04:47.918 --> 00:04:51.602 on settings and that for patients with

NOTE Confidence: 0.905267984285714

00:04:51.602 --> 00:04:53.679 neuromuscular conditions and COPD,

NOTE Confidence: 0.905267984285714

00:04:53.679 --> 00:04:55.353 and you'll see why shortly and

NOTE Confidence: 0.905267984285714

00:04:55.353 --> 00:04:57.238 also talk a little bit about,

NOTE Confidence: 0.905267984285714

00:04:57.240 --> 00:04:58.521 you know automated.

NOTE Confidence: 0.905267984285714

00:04:58.521 --> 00:04:58.948 Therapy,

NOTE Confidence: 0.905267984285714

00:04:58.948 --> 00:05:02.067 but I think also a topic that's

NOTE Confidence: 0.905267984285714

00:05:02.067 --> 00:05:04.407 becoming more of interest around

NOTE Confidence: 0.905267984285714

00:05:04.407 --> 00:05:07.522 the world is where we should be

NOTE Confidence: 0.905267984285714

00:05:07.522 --> 00:05:10.006 locating the acclamation to therapy in

NOTE Confidence: 0.905267984285714

00:05:10.006 --> 00:05:12.269 individuals with sleep hypoventilation.

NOTE Confidence: 0.905267984285714

00:05:12.270 --> 00:05:15.570 So the inpatient versus the outpatient

NOTE Confidence: 0.905267984285714

00:05:15.570 --> 00:05:20.016 in lab with PSG in the home or in

NOTE Confidence: 0.905267984285714

00:05:20.016 --> 00:05:22.774 hospital situations and then talking

NOTE Confidence: 0.905267984285714

00:05:22.774 --> 00:05:25.604 about ongoing titration and monitoring.

NOTE Confidence: 0.905267984285714

00:05:25.610 --> 00:05:28.338 And I think some caveats before I start.

NOTE Confidence: 0.905267984285714

00:05:28.340 --> 00:05:30.728 First of all, uh, Australia is

NOTE Confidence: 0.905267984285714

00:05:30.728 --> 00:05:34.009 roughly the same size as the contiguous US,

NOTE Confidence: 0.905267984285714

00:05:34.010 --> 00:05:37.730 so we are a large country,

NOTE Confidence: 0.905267984285714

00:05:37.730 --> 00:05:39.400 a small, very small continent.

NOTE Confidence: 0.905267984285714

00:05:39.400 --> 00:05:40.750 Very large country,

NOTE Confidence: 0.905267984285714

00:05:40.750 --> 00:05:43.450 but we have very different populations

NOTE Confidence: 0.905267984285714

00:05:43.450 --> 00:05:46.148 are compared to the United States,

NOTE Confidence: 0.905267984285714

00:05:46.150 --> 00:05:47.774 so you know you have it roughly.

NOTE Confidence: 0.905267984285714

00:05:47.780 --> 00:05:51.300 You know 10 times our population at least,

NOTE Confidence: 0.905267984285714

00:05:51.300 --> 00:05:54.720 and that has a lot of implications for us,

NOTE Confidence: 0.905267984285714

00:05:54.720 --> 00:05:55.899 and you know,

NOTE Confidence: 0.905267984285714

00:05:55.899 --> 00:05:58.650 and the information that I gleaned from.

NOTE Confidence: 0.905267984285714

00:05:58.650 --> 00:06:01.026 The literature and what we do in terms of

NOTE Confidence: 0.905267984285714

00:06:01.026 --> 00:06:03.709 our population density and the travel times.

NOTE Confidence: 0.905267984285714

00:06:03.710 --> 00:06:06.146 A lot of our patients have in

NOTE Confidence: 0.905267984285714

00:06:06.146 --> 00:06:08.960 coming to see us and the barriers

NOTE Confidence: 0.905267984285714

00:06:08.960 --> 00:06:11.486 to therapy because of that very,

NOTE Confidence: 0.905267984285714

00:06:11.490 --> 00:06:13.332 very sparse population.

NOTE Confidence: 0.905267984285714

00:06:13.332 --> 00:06:18.050 So most of uh of Australians 50% live

NOTE Confidence: 0.905267984285714

00:06:18.050 --> 00:06:20.990 between what's Brisbane marked on this map,

NOTE Confidence: 0.905267984285714

00:06:20.990 --> 00:06:23.573 which is sort of the center of the right

NOTE Confidence: 0.905267984285714

00:06:23.573 --> 00:06:26.487 hand side of the continent down to Melbourne.

NOTE Confidence: 0.905267984285714

00:06:26.490 --> 00:06:29.988 So 50% of the Australian population.

NOTE Confidence: 0.905267984285714

00:06:29.990 --> 00:06:31.935 Living within that region and

NOTE Confidence: 0.905267984285714

00:06:31.935 --> 00:06:33.880 so a lot of the

NOTE Confidence: 0.867341927333333

00:06:33.972 --> 00:06:36.148 country is made up of individuals

NOTE Confidence: 0.867341927333333

00:06:36.148 --> 00:06:37.938 that you can see below,

NOTE Confidence: 0.867341927333333

00:06:37.940 --> 00:06:39.504 like this kangaroo and

NOTE Confidence: 0.867341927333333

00:06:39.504 --> 00:06:41.850 lots and lots of you know,

NOTE Confidence: 0.867341927333333

00:06:41.850 --> 00:06:45.338 open space what we call the red Center.

NOTE Confidence: 0.867341927333333

00:06:45.340 --> 00:06:48.388 The other obvious.

NOTE Confidence: 0.867341927333333

00:06:48.390 --> 00:06:50.490 Implication and how to interpret some

NOTE Confidence: 0.867341927333333

00:06:50.490 --> 00:06:53.115 of this stuff that I'm talking about

NOTE Confidence: 0.867341927333333

00:06:53.115 --> 00:06:55.437 is the huge difference in healthcare

NOTE Confidence: 0.867341927333333

00:06:55.437 --> 00:06:57.296 funding between our two areas.

NOTE Confidence: 0.867341927333333

00:06:57.296 --> 00:07:00.092 So in Australia we have the

NOTE Confidence: 0.867341927333333

00:07:00.092 --> 00:07:01.574 federal government collects taxes

NOTE Confidence: 0.867341927333333

00:07:01.574 --> 00:07:03.478 and then gives it to the state

NOTE Confidence: 0.867341927333333

00:07:03.478 --> 00:07:05.055 and territory governments who

NOTE Confidence: 0.867341927333333

00:07:05.055 --> 00:07:07.135 actually run the hospital systems.

NOTE Confidence: 0.867341927333333

00:07:07.140 --> 00:07:09.688 We do have our private health insurers,

NOTE Confidence: 0.867341927333333

00:07:09.690 --> 00:07:11.940 but they make up very much

NOTE Confidence: 0.867341927333333

00:07:11.940 --> 00:07:13.959 smaller proportion of the sort

NOTE Confidence: 0.867341927333333

00:07:13.959 --> 00:07:15.747 of healthcare that Australians

NOTE Confidence: 0.867341927333333

00:07:15.747 --> 00:07:18.560 receive and very much like Canada.

NOTE Confidence: 0.867341927333333

00:07:18.560 --> 00:07:21.351 We have a universal health health

NOTE Confidence: 0.867341927333333

00:07:21.351 --> 00:07:24.478 insurance scheme which is means although

NOTE Confidence: 0.867341927333333

00:07:24.478 --> 00:07:26.704 we pay for it through our taxes,

NOTE Confidence: 0.867341927333333

00:07:26.710 --> 00:07:28.124 we can turn up to you know,

NOTE Confidence: 0.867341927333333

00:07:28.130 --> 00:07:30.755 any public hospital for any

NOTE Confidence: 0.867341927333333

00:07:30.755 --> 00:07:32.632 condition and receive our free

NOTE Confidence: 0.867341927333333

00:07:32.632 --> 00:07:34.660 care at that particular point and

NOTE Confidence: 0.867341927333333

00:07:34.722 --> 00:07:36.850 that includes outpatient services.

NOTE Confidence: 0.867341927333333

00:07:36.850 --> 00:07:39.790 We also have subsidized medications,

NOTE Confidence: 0.867341927333333

00:07:39.790 --> 00:07:42.380 so when it comes to the provision

NOTE Confidence: 0.867341927333333

00:07:42.380 --> 00:07:44.363 of bilevel or ventilators in

NOTE Confidence: 0.867341927333333

00:07:44.363 --> 00:07:46.727 the state that I live in,

NOTE Confidence: 0.867341927333333

00:07:46.730 --> 00:07:49.420 it's funded through a specific.

NOTE Confidence: 0.867341927333333

00:07:49.420 --> 00:07:52.828 NSW government body called Enable

NOTE Confidence: 0.867341927333333

00:07:52.828 --> 00:07:55.684 where the criteria to get this

NOTE Confidence: 0.867341927333333

00:07:55.684 --> 00:07:58.269 equipment is largely evidence based

NOTE Confidence: 0.867341927333333

00:07:58.270 --> 00:07:59.978 with some clinical justification,

NOTE Confidence: 0.867341927333333

00:07:59.978 --> 00:08:02.113 so it's not particularly difficult

NOTE Confidence: 0.867341927333333

00:08:02.113 --> 00:08:03.985 to get equipment and patients

NOTE Confidence: 0.867341927333333

00:08:03.985 --> 00:08:06.526 don't have to pay for it.

NOTE Confidence: 0.867341927333333

00:08:06.526 --> 00:08:07.822 Apart from $100.

NOTE Confidence: 0.867341927333333

00:08:07.822 --> 00:08:10.614 I think that it is a year as a

NOTE Confidence: 0.867341927333333

00:08:10.614 --> 00:08:12.474 an administration fee which will

NOTE Confidence: 0.867341927333333

00:08:12.474 --> 00:08:14.863 be waivered if they just claim

NOTE Confidence: 0.867341927333333

00:08:14.863 --> 00:08:16.459 they can't afford that.

NOTE Confidence: 0.867341927333333

00:08:16.460 --> 00:08:18.260 Very different to the United States

NOTE Confidence: 0.867341927333333

00:08:18.260 --> 00:08:20.498 and I won't even try to get my

NOTE Confidence: 0.867341927333333

00:08:20.498 --> 00:08:22.114 head around how your reimbursement

NOTE Confidence: 0.867341927333333

00:08:22.114 --> 00:08:24.650 and funding system works,

NOTE Confidence: 0.867341927333333

00:08:24.650 --> 00:08:27.051 but I think there are two interesting

NOTE Confidence: 0.867341927333333

00:08:27.051 --> 00:08:29.325 papers which I haven't read all

NOTE Confidence: 0.867341927333333

00:08:29.325 --> 00:08:31.665 the way through because it's not

NOTE Confidence: 0.867341927333333

00:08:31.665 --> 00:08:33.379 pertinent to my situation but

NOTE Confidence: 0.867341927333333

00:08:33.380 --> 00:08:36.140 that big Mccleskey and Nikhil or

NOTE Confidence: 0.867341927333333

00:08:36.140 --> 00:08:38.580 written papers talking uh with

NOTE Confidence: 0.867341927333333

00:08:38.580 --> 00:08:41.160 some results from their technical

NOTE Confidence: 0.867341927333333

00:08:41.160 --> 00:08:44.008 expert panel report trying to look

NOTE Confidence: 0.867341927333333

00:08:44.008 --> 00:08:46.472 at how to improve the access to.

NOTE Confidence: 0.867341927333333

00:08:46.480 --> 00:08:47.804 Bilevel devices for patients

NOTE Confidence: 0.867341927333333

00:08:47.804 --> 00:08:49.459 with various types of sleep,

NOTE Confidence: 0.867341927333333

00:08:49.460 --> 00:08:50.882 hypoventilation in particular,

NOTE Confidence: 0.867341927333333

00:08:50.882 --> 00:08:53.252 getting easier access to the

NOTE Confidence: 0.867341927333333

00:08:53.252 --> 00:08:55.320 St modes of ventilation,

NOTE Confidence: 0.867341927333333

00:08:55.320 --> 00:08:57.780 because certainly there's increasing

NOTE Confidence: 0.867341927333333

00:08:57.780 --> 00:09:00.380 evidence that this can be quite useful,

NOTE Confidence: 0.867341927333333

00:09:00.380 --> 00:09:02.424 particularly in patients with

NOTE Confidence: 0.867341927333333

00:09:02.424 --> 00:09:05.620 with things like COPD.

NOTE Confidence: 0.867341927333333

00:09:05.620 --> 00:09:06.905 So when we think about

NOTE Confidence: 0.867341927333333

00:09:06.905 --> 00:09:07.676 non invasive ventilation,

NOTE Confidence: 0.867341927333333

00:09:07.680 --> 00:09:10.480 we have to think about what we're trying

NOTE Confidence: 0.867341927333333

00:09:10.480 --> 00:09:13.038 to achieve and obviously you know we.

NOTE Confidence: 0.867341927333333

00:09:13.040 --> 00:09:14.768 We think about improving gas exchange

NOTE Confidence: 0.867341927333333

00:09:14.768 --> 00:09:16.780 to not only when there is sleep,

NOTE Confidence: 0.867341927333333

00:09:16.780 --> 00:09:18.440 but hopefully they've already

NOTE Confidence: 0.867341927333333

00:09:18.440 --> 00:09:20.100 inhabit Catholic respiratory failure.

NOTE Confidence: 0.867341927333333

00:09:20.100 --> 00:09:22.156 Reversing that daytime respiratory

NOTE Confidence: 0.867341927333333

00:09:22.156 --> 00:09:24.726 failure primarily by preventing or

NOTE Confidence: 0.867341927333333

00:09:24.726 --> 00:09:26.979 minimizing abnormal breathing events,

NOTE Confidence: 0.867341927333333

00:09:26.980 --> 00:09:27.866 chilling sleep,

NOTE Confidence: 0.867341927333333

00:09:27.866 --> 00:09:30.967 and at the same time trying to

NOTE Confidence: 0.867341927333333

00:09:30.967 --> 00:09:32.970 facilitate uninterrupted sleep

NOTE Confidence: 0.867341927333333

00:09:32.970 --> 00:09:34.260 from a patient's point of view,

NOTE Confidence: 0.867341927333333

00:09:34.260 --> 00:09:35.630 they really want to have.

NOTE Confidence: 0.867341927333333

00:09:35.630 --> 00:09:37.235 Relief that their symptoms and

NOTE Confidence: 0.867341927333333

00:09:37.235 --> 00:09:39.160 improvement in their quality of life.

NOTE Confidence: 0.867341927333333

00:09:39.160 --> 00:09:42.130 And often this is around

NOTE Confidence: 0.867341927333333

00:09:42.130 --> 00:09:43.318 reducing hospitalizations,

NOTE Confidence: 0.867341927333333

00:09:43.320 --> 00:09:45.240 and if we are going to

NOTE Confidence: 0.867341927333333

00:09:45.240 --> 00:09:46.200 treat these individuals,

NOTE Confidence: 0.867341927333333

00:09:46.200 --> 00:09:51.044 we want to extend meaningful past survival.

NOTE Confidence: 0.867341927333333

00:09:51.050 --> 00:09:52.690 When it comes to therapy,

NOTE Confidence: 0.867341927333333

00:09:52.690 --> 00:09:54.976 there's a whole range of different

NOTE Confidence: 0.867341927333333

00:09:54.976 --> 00:09:58.125 machines that we can use from very simple

NOTE Confidence: 0.867341927333333

00:09:58.125 --> 00:10:00.453 bilevel devices to the more complex

NOTE Confidence: 0.860185861666667

00:10:00.525 --> 00:10:02.117 home high end machines.

NOTE Confidence: 0.860185861666667

00:10:02.120 --> 00:10:03.975 There's a whole range of

NOTE Confidence: 0.860185861666667

00:10:03.975 --> 00:10:06.130 masks that we have access to,

NOTE Confidence: 0.860185861666667

00:10:06.130 --> 00:10:07.966 as well as thinking about the

NOTE Confidence: 0.860185861666667

00:10:07.966 --> 00:10:09.656 primary settings on the machines

NOTE Confidence: 0.860185861666667

00:10:09.656 --> 00:10:11.676 and the different machines there,

NOTE Confidence: 0.860185861666667

00:10:11.680 --> 00:10:13.927 and silly settings that we should be

NOTE Confidence: 0.860185861666667

00:10:13.927 --> 00:10:16.299 using to try and match better what

NOTE Confidence: 0.860185861666667

00:10:16.299 --> 00:10:18.849 the machine is doing and what the

NOTE Confidence: 0.860185861666667

00:10:18.849 --> 00:10:20.737 patients ventilator demands are.

NOTE Confidence: 0.860185861666667

00:10:20.740 --> 00:10:23.268 So getting noninvasive ventilation

NOTE Confidence: 0.860185861666667

00:10:23.268 --> 00:10:26.868 right is very much about picking

NOTE Confidence: 0.860185861666667

00:10:26.868 --> 00:10:29.496 the right patient under the right

NOTE Confidence: 0.860185861666667

00:10:29.496 --> 00:10:31.540 circumstances at the right time

NOTE Confidence: 0.860185861666667

00:10:31.540 --> 00:10:33.540 and using the most appropriate

NOTE Confidence: 0.860185861666667

00:10:33.540 --> 00:10:35.948 and right equipment for them.

NOTE Confidence: 0.860185861666667

00:10:35.950 --> 00:10:38.344 And when we look at some of the stuff

NOTE Confidence: 0.860185861666667

00:10:38.344 --> 00:10:40.499 that is coming out from from Europe,

NOTE Confidence: 0.860185861666667

00:10:40.499 --> 00:10:41.237 for instance,

NOTE Confidence: 0.860185861666667

00:10:41.237 --> 00:10:44.409 you can see over the last two decades

NOTE Confidence: 0.860185861666667

00:10:44.409 --> 00:10:47.493 the increasing use of non invasive

NOTE Confidence: 0.860185861666667

00:10:47.493 --> 00:10:50.048 ventilation being prescribed for the home.

NOTE Confidence: 0.860185861666667

00:10:50.050 --> 00:10:52.528 So from the anti dear our database

NOTE Confidence: 0.860185861666667

00:10:52.528 --> 00:10:55.212 which is a very extensive database

NOTE Confidence: 0.860185861666667

00:10:55.212 --> 00:10:58.660 from the French you can see in the

NOTE Confidence: 0.860185861666667

00:10:58.660 --> 00:11:00.188 management of chronic respiratory

NOTE Confidence: 0.860185861666667

00:11:00.188 --> 00:11:03.009 failure over the last two decades at this

NOTE Confidence: 0.860185861666667

00:11:03.009 --> 00:11:05.618 marked reduction in treating these patients.

NOTE Confidence: 0.860185861666667

00:11:05.620 --> 00:11:09.976 With oxygen therapy alone fairly steady.

NOTE Confidence: 0.860185861666667

00:11:09.980 --> 00:11:12.518 Centage of patients still receiving CPAP,

NOTE Confidence: 0.860185861666667

00:11:12.520 --> 00:11:15.670 but the increasing number of patients

NOTE Confidence: 0.860185861666667

00:11:15.670 --> 00:11:17.770 receiving noninvasive ventilation either

NOTE Confidence: 0.860185861666667

00:11:17.841 --> 00:11:21.539 with without supplemental oxygen.

NOTE Confidence: 0.860185861666667

00:11:21.540 --> 00:11:23.835 And similarly a very recent

NOTE Confidence: 0.860185861666667

00:11:23.835 --> 00:11:26.130 study looking out of Switzerland

NOTE Confidence: 0.860185861666667

00:11:26.210 --> 00:11:28.660 looking around Lake Geneva area,

NOTE Confidence: 0.860185861666667

00:11:28.660 --> 00:11:31.775 just showing that over the last two

NOTE Confidence: 0.860185861666667

00:11:31.775 --> 00:11:34.075 decades the increasing number of

NOTE Confidence: 0.860185861666667

00:11:34.075 --> 00:11:37.208 patients with COPD which were being

NOTE Confidence: 0.860185861666667

00:11:37.208 --> 00:11:39.456 prescribed non invasive ventilation

NOTE Confidence: 0.860185861666667

00:11:39.460 --> 00:11:42.610 reducing numbers of patients with

NOTE Confidence: 0.860185861666667

00:11:42.610 --> 00:11:45.660 LHS receiving CPAP rather than non

NOTE Confidence: 0.860185861666667

00:11:45.660 --> 00:11:48.654 invasive ventilation and the numbers of

NOTE Confidence: 0.860185861666667

00:11:48.654 --> 00:11:51.630 patients with neuromuscular disease has been.

NOTE Confidence: 0.860185861666667

00:11:51.630 --> 00:11:52.534 Relatively steady.

NOTE Confidence: 0.860185861666667

00:11:52.534 --> 00:11:55.698 And this is before we've had the

NOTE Confidence: 0.860185861666667

00:11:55.698 --> 00:11:58.181 two guidelines regarding COPD

NOTE Confidence: 0.860185861666667

00:11:58.181 --> 00:12:00.288 and play chess come out out from

NOTE Confidence: 0.860185861666667

00:12:00.288 --> 00:12:01.979 the American Thoracic Society.

NOTE Confidence: 0.860185861666667

00:12:01.980 --> 00:12:05.920 And also some guidelines regarding

NOTE Confidence: 0.860185861666667

00:12:05.920 --> 00:12:08.476 COPD from the European Sports Society.

NOTE Confidence: 0.860185861666667

00:12:08.480 --> 00:12:11.679 So we would sort of expect particularly

NOTE Confidence: 0.860185861666667

00:12:11.679 --> 00:12:15.087 around COPD increasing members so

NOTE Confidence: 0.860185861666667

00:12:15.087 --> 00:12:16.396 I don't have to tell this group.

NOTE Confidence: 0.860185861666667

00:12:16.400 --> 00:12:18.926 You know the importance of the

NOTE Confidence: 0.860185861666667

00:12:18.926 --> 00:12:20.610 physiological changes that occur

NOTE Confidence: 0.860185861666667

00:12:20.681 --> 00:12:21.549 during sleep,

NOTE Confidence: 0.860185861666667

00:12:21.550 --> 00:12:23.770 which lead to increased upper airway.

NOTE Confidence: 0.860185861666667

00:12:23.770 --> 00:12:26.722 Resistance or reductions in the spiritual

NOTE Confidence: 0.860185861666667

00:12:26.722 --> 00:12:30.139 muscle turn and reduced chemo sensitivity,

NOTE Confidence: 0.860185861666667

00:12:30.140 --> 00:12:34.022 or reducing the potential for reduced

NOTE Confidence: 0.860185861666667

00:12:34.022 --> 00:12:36.610 minute ventilation and alveolar

NOTE Confidence: 0.860185861666667

00:12:36.711 --> 00:12:39.972 ventilation in patients with COPDV

NOTE Confidence: 0.860185861666667

00:12:39.972 --> 00:12:42.500 city hyperventilation and those

NOTE Confidence: 0.860185861666667

00:12:42.500 --> 00:12:44.396 with neuromuscular conditions.

NOTE Confidence: 0.860185861666667

00:12:44.400 --> 00:12:46.368 When we're applying on the basis

NOTE Confidence: 0.860185861666667

00:12:46.368 --> 00:12:47.024 of ventilation,

NOTE Confidence: 0.860185861666667

00:12:47.030 --> 00:12:49.375 we now have the opportunity to try

NOTE Confidence: 0.860185861666667

00:12:49.375 --> 00:12:52.378 and control that the upper airway,

NOTE Confidence: 0.860185861666667

00:12:52.378 --> 00:12:54.706 increase resistance or collapse.

NOTE Confidence: 0.860185861666667

00:12:54.710 --> 00:12:57.878 We have the inspiratory.

NOTE Confidence: 0.860185861666667

00:12:57.880 --> 00:13:01.060 Trisha support to try to improve

NOTE Confidence: 0.860185861666667

00:13:01.060 --> 00:13:01.760 title volumes.

NOTE Confidence: 0.860185861666667

00:13:01.760 --> 00:13:04.979 And we have the ability to add a backup

NOTE Confidence: 0.860185861666667

00:13:04.979 --> 00:13:07.429 rate all with the aim of increasing

NOTE Confidence: 0.860185861666667

00:13:07.429 --> 00:13:10.029 alveolar ventilation in these individuals.

NOTE Confidence: 0.860185861666667

00:13:10.030 --> 00:13:13.097 But we should never forget that there

NOTE Confidence: 0.860185861666667

00:13:13.097 --> 00:13:15.332 is a bidirectional relationship between

NOTE Confidence: 0.860185861666667

00:13:15.332 --> 00:13:17.626 sleep and non invasive ventilation

NOTE Confidence: 0.860185861666667

00:13:17.626 --> 00:13:19.796 in their non invasive ventilation

NOTE Confidence: 0.860185861666667

00:13:19.796 --> 00:13:22.339 can be disrupted for sleep but

NOTE Confidence: 0.860185861666667

00:13:22.339 --> 00:13:24.547 it can also improve sleep quality

NOTE Confidence: 0.860185861666667

00:13:24.547 --> 00:13:26.826 but likewise sleep have different

NOTE Confidence: 0.860185861666667

00:13:26.826 --> 00:13:28.874 impacts on invasive ventilation.

NOTE Confidence: 0.860185861666667

00:13:28.880 --> 00:13:30.884 Compared to the right from the

NOTE Confidence: 0.860185861666667

00:13:30.884 --> 00:13:33.260 state had when we have non invasive

NOTE Confidence: 0.860185861666667

00:13:33.260 --> 00:13:35.065 ventilation during sleep we can

NOTE Confidence: 0.860185861666667

00:13:35.065 --> 00:13:36.945 see things like glottic closure

NOTE Confidence: 0.860185861666667

00:13:36.945 --> 00:13:39.025 with central events created by

NOTE Confidence: 0.860185861666667

00:13:39.025 --> 00:13:40.549 noninvasive ventilation itself,

NOTE Confidence: 0.860185861666667

00:13:40.550 --> 00:13:42.830 which can have an impact on

NOTE Confidence: 0.860185861666667

00:13:42.830 --> 00:13:44.350 sleep and hints breathing,

NOTE Confidence: 0.860185861666667

00:13:44.350 --> 00:13:46.552 and we also have at any

NOTE Confidence: 0.860185861666667

00:13:46.552 --> 00:13:48.020 time during wakefulness or

NOTE Confidence: 0.824701636363636

00:13:48.099 --> 00:13:51.280 sleep. The potential to create patient

NOTE Confidence: 0.824701636363636

00:13:51.280 --> 00:13:54.020 ventilator asynchrony which can again

NOTE Confidence: 0.824701636363636

00:13:54.103 --> 00:13:57.517 impact the efficacy of ventilatory support.

NOTE Confidence: 0.824701636363636

00:13:57.520 --> 00:13:59.336 So if we start thinking about the inszoom

NOTE Confidence: 0.824701636363636

00:13:59.336 --> 00:14:01.000 outs of noninvasive ventillation,

NOTE Confidence: 0.824701636363636

00:14:01.000 --> 00:14:04.010 we have to start with inspiratory support.

NOTE Confidence: 0.824701636363636

00:14:04.010 --> 00:14:05.394 You know. And obviously,

NOTE Confidence: 0.824701636363636

00:14:05.394 --> 00:14:08.158 the higher that we set the iPad and

NOTE Confidence: 0.824701636363636

00:14:08.158 --> 00:14:09.898 epep difference, the more support

NOTE Confidence: 0.824701636363636

00:14:09.898 --> 00:14:12.020 the patient is going to receive.

NOTE Confidence: 0.824701636363636

00:14:12.020 --> 00:14:13.584 And in doing that,

NOTE Confidence: 0.824701636363636

00:14:13.584 --> 00:14:16.876 particularly if we have a a patient

NOTE Confidence: 0.824701636363636

00:14:16.876 --> 00:14:20.216 who is taking small breaths,

NOTE Confidence: 0.824701636363636

00:14:20.220 --> 00:14:22.467 we're going to add by increasing

NOTE Confidence: 0.824701636363636

00:14:22.467 --> 00:14:23.778 their title volumes.

NOTE Confidence: 0.824701636363636

00:14:23.778 --> 00:14:26.800 We often can steady there breathing down,

NOTE Confidence: 0.824701636363636

00:14:26.800 --> 00:14:28.555 reduce their respiratory.

NOTE Confidence: 0.824701636363636

00:14:28.555 --> 00:14:32.434 Right and making far more comfortable with.

NOTE Confidence: 0.824701636363636

00:14:32.434 --> 00:14:32.798 Surprisingly,

NOTE Confidence: 0.824701636363636

00:14:32.798 --> 00:14:34.982 sometimes with the higher pressures rather

NOTE Confidence: 0.824701636363636

00:14:34.982 --> 00:14:36.972 than the lower pressures the patient

NOTE Confidence: 0.824701636363636

00:14:36.972 --> 00:14:39.219 needs to feel as though they're being

NOTE Confidence: 0.824701636363636

00:14:39.219 --> 00:14:41.099 adequately supported with each breath,

NOTE Confidence: 0.824701636363636

00:14:41.100 --> 00:14:44.440 particularly patients with COPD.

NOTE Confidence: 0.824701636363636

00:14:44.440 --> 00:14:46.915 So when we're looking at setting

NOTE Confidence: 0.824701636363636

00:14:46.915 --> 00:14:48.190 that inspiratory pressure,

NOTE Confidence: 0.824701636363636

00:14:48.190 --> 00:14:51.211 we're looking at our ability to reduce

NOTE Confidence: 0.824701636363636

00:14:51.211 --> 00:14:53.242 the carbon dioxide because we've

NOTE Confidence: 0.824701636363636

00:14:53.242 --> 00:14:55.297 increasing our bill of ventilation.

NOTE Confidence: 0.824701636363636

00:14:55.300 --> 00:14:57.742 So generally we're trying to get

NOTE Confidence: 0.824701636363636

00:14:57.742 --> 00:15:00.059 that pressure support to a point

NOTE Confidence: 0.824701636363636

00:15:00.059 --> 00:15:02.237 where we can generate a title,

NOTE Confidence: 0.824701636363636

00:15:02.240 --> 00:15:02.778 volume,

NOTE Confidence: 0.824701636363636

00:15:02.778 --> 00:15:05.468 and the patients asleep somewhere

NOTE Confidence: 0.824701636363636

00:15:05.468 --> 00:15:08.479 between six and eight goals for

NOTE Confidence: 0.824701636363636

00:15:08.480 --> 00:15:11.150 per kilogram of ideal body weight.

NOTE Confidence: 0.824701636363636

00:15:11.150 --> 00:15:13.060 For patients with a neuromuscular

NOTE Confidence: 0.824701636363636

00:15:13.060 --> 00:15:14.588 condition and between 8.

NOTE Confidence: 0.824701636363636

00:15:14.590 --> 00:15:17.260 Teacher bad at mills for kilogram

NOTE Confidence: 0.824701636363636

00:15:17.260 --> 00:15:19.040 per patient with COPD.

NOTE Confidence: 0.824701636363636

00:15:19.040 --> 00:15:23.000 So here we are trying to reduce the CO2.

NOTE Confidence: 0.824701636363636

00:15:23.000 --> 00:15:24.245 Looking at nighttime.

NOTE Confidence: 0.824701636363636

00:15:24.245 --> 00:15:27.626 We want that nocturnal CO2 to be

NOTE Confidence: 0.824701636363636

00:15:27.626 --> 00:15:30.525 at least the same as the awake

NOTE Confidence: 0.824701636363636

00:15:30.525 --> 00:15:32.280 CO2 or in many patients,

NOTE Confidence: 0.824701636363636

00:15:32.280 --> 00:15:33.570 particularly those that

NOTE Confidence: 0.824701636363636

00:15:33.570 --> 00:15:34.860 have daytime hypercapnia.

NOTE Confidence: 0.824701636363636

00:15:34.860 --> 00:15:38.244 We want to make it lower than the they're

NOTE Confidence: 0.824701636363636

00:15:38.244 --> 00:15:41.630 awake CO2 levels and in patients with COPD.

NOTE Confidence: 0.824701636363636

00:15:41.630 --> 00:15:43.110 Certainly there is evidence

NOTE Confidence: 0.824701636363636

00:15:43.110 --> 00:15:44.590 coming out that way.

NOTE Confidence: 0.824701636363636

00:15:44.590 --> 00:15:48.160 Really, painting the goal is a

NOTE Confidence: 0.824701636363636

00:15:48.160 --> 00:15:51.860 reduction in CO2 of about 20%.

NOTE Confidence: 0.824701636363636

00:15:51.860 --> 00:15:54.884 The outs of course refer to the

NOTE Confidence: 0.824701636363636

00:15:54.884 --> 00:15:57.029 impact pressure and you know.

NOTE Confidence: 0.824701636363636

00:15:57.030 --> 00:15:57.306 Again,

NOTE Confidence: 0.824701636363636

00:15:57.306 --> 00:15:58.686 you know this group knows.

NOTE Confidence: 0.824701636363636

00:15:58.690 --> 00:16:01.616 You know we're using epact to prevent

NOTE Confidence: 0.824701636363636

00:16:01.616 --> 00:16:03.829 that airway closure or collapse,

NOTE Confidence: 0.824701636363636

00:16:03.830 --> 00:16:05.490 and particularly in patients

NOTE Confidence: 0.824701636363636

00:16:05.490 --> 00:16:07.980 with things like be sitting with

NOTE Confidence: 0.824701636363636

00:16:08.053 --> 00:16:09.734 related hypoventilation overlap

NOTE Confidence: 0.824701636363636

00:16:09.734 --> 00:16:12.744 syndrome and certain patients with

NOTE Confidence: 0.824701636363636

00:16:12.744 --> 00:16:14.980 neuromuscular conditions as well.

NOTE Confidence: 0.824701636363636

00:16:14.980 --> 00:16:18.144 And the problem is that that upper

NOTE Confidence: 0.824701636363636

00:16:18.144 --> 00:16:20.564 airway aperture can change depending

NOTE Confidence: 0.824701636363636

00:16:20.564 --> 00:16:23.510 on sleep stage and body position.

NOTE Confidence: 0.824701636363636

00:16:23.510 --> 00:16:25.995 We can also use the pack for

NOTE Confidence: 0.824701636363636

00:16:25.995 --> 00:16:27.060 offsetting intrinsic peak.

NOTE Confidence: 0.824701636363636

00:16:27.060 --> 00:16:29.184 In patients with COPD trying to

NOTE Confidence: 0.824701636363636

00:16:29.184 --> 00:16:31.360 reduce the effort of breathing,

NOTE Confidence: 0.824701636363636

00:16:31.360 --> 00:16:34.132 they haven't and work of breathing

NOTE Confidence: 0.824701636363636

00:16:34.132 --> 00:16:37.284 and trying to prevent our unrewarded

NOTE Confidence: 0.824701636363636

00:16:37.284 --> 00:16:39.462 efforts that often patients with

NOTE Confidence: 0.824701636363636

00:16:39.462 --> 00:16:41.820 COPD can present with during long

NOTE Confidence: 0.824701636363636

00:16:41.896 --> 00:16:43.896 invasive ventilation and they gain

NOTE Confidence: 0.824701636363636

00:16:43.896 --> 00:16:46.580 the ability to put these patients.

NOTE Confidence: 0.824701636363636

00:16:46.580 --> 00:16:48.820 At least from my experience.

NOTE Confidence: 0.824701636363636

00:16:48.820 --> 00:16:51.039 And I know some of the European

NOTE Confidence: 0.824701636363636

00:16:51.039 --> 00:16:52.774 experience having a backup rate

NOTE Confidence: 0.824701636363636

00:16:52.774 --> 00:16:55.294 high enough where we just don't see

NOTE Confidence: 0.824701636363636

00:16:55.294 --> 00:16:57.360 unrewarded efforts. Because we're.

NOTE Confidence: 0.824701636363636

00:16:57.360 --> 00:17:00.780 Hoping to ensure each breath is

NOTE Confidence: 0.824701636363636

00:17:00.780 --> 00:17:03.345 being is being received by the

NOTE Confidence: 0.824701636363636

00:17:03.345 --> 00:17:05.980 patient when they make an effort.

NOTE Confidence: 0.824701636363636

00:17:05.980 --> 00:17:08.860 That's a pet. It is a fine balance.

NOTE Confidence: 0.824701636363636

00:17:08.860 --> 00:17:12.115 We want enough to achieve the goals

NOTE Confidence: 0.824701636363636

00:17:12.115 --> 00:17:14.304 or preventing or offsetting intrinsic

NOTE Confidence: 0.824701636363636

00:17:14.304 --> 00:17:16.812 people or preventing upper airway collapse.

NOTE Confidence: 0.824701636363636

00:17:16.820 --> 00:17:19.144 But we also want to make sure

NOTE Confidence: 0.824701636363636

00:17:19.144 --> 00:17:21.058 we're not setting it too high,

NOTE Confidence: 0.824701636363636

00:17:21.060 --> 00:17:22.545 because it will be uncomfortable

NOTE Confidence: 0.824701636363636

00:17:22.545 --> 00:17:24.030 for the patient making it

NOTE Confidence: 0.883894591875

00:17:24.089 --> 00:17:25.679 harder for them to breathe out.

NOTE Confidence: 0.883894591875

00:17:25.680 --> 00:17:28.207 But also, as we increase the iPad,

NOTE Confidence: 0.883894591875

00:17:28.210 --> 00:17:30.295 just creating unnecessary

NOTE Confidence: 0.883894591875

00:17:30.295 --> 00:17:33.075 leak for the patient.

NOTE Confidence: 0.883894591875

00:17:33.080 --> 00:17:36.256 I think we also have to think about.

NOTE Confidence: 0.883894591875

00:17:36.260 --> 00:17:39.500 Groups where maybe a bit obstruction

NOTE Confidence: 0.883894591875

00:17:39.500 --> 00:17:42.170 doesn't immediately come to mind,

NOTE Confidence: 0.883894591875

00:17:42.170 --> 00:17:44.662 and certainly patients with

NOTE Confidence: 0.883894591875

00:17:44.662 --> 00:17:47.777 a LS motor neurone disease.

NOTE Confidence: 0.883894591875

00:17:47.780 --> 00:17:50.069 How can also often have a very

NOTE Confidence: 0.883894591875

00:17:50.069 --> 00:17:51.919 tricky upper airway even though

NOTE Confidence: 0.883894591875

00:17:51.919 --> 00:17:53.924 they've gotta love Chris Pucci,

NOTE Confidence: 0.883894591875

00:17:53.930 --> 00:17:57.892 muscle weakness and George is this French

NOTE Confidence: 0.883894591875

00:17:57.892 --> 00:18:01.778 group headed up by George is Dad 179.

NOTE Confidence: 0.883894591875

00:18:01.778 --> 00:18:04.316 A list patients and thereby

NOTE Confidence: 0.883894591875

00:18:04.316 --> 00:18:06.660 using very simple oxygen.

NOTE Confidence: 0.883894591875

00:18:06.660 --> 00:18:08.620 Saturation monitoring and looking at

NOTE Confidence: 0.883894591875

00:18:08.620 --> 00:18:11.510 the pattern of that as well as leak.

NOTE Confidence: 0.883894591875

00:18:11.510 --> 00:18:14.672 They identify patients group that is

NOTE Confidence: 0.883894591875

00:18:14.672 --> 00:18:16.780 either having adequate ventilation

NOTE Confidence: 0.883894591875

00:18:16.856 --> 00:18:18.724 or being inadequately ventilated

NOTE Confidence: 0.883894591875

00:18:18.724 --> 00:18:21.980 and this is a very experienced group

NOTE Confidence: 0.883894591875

00:18:21.980 --> 00:18:24.140 of clinicians and researchers in

NOTE Confidence: 0.883894591875

00:18:24.140 --> 00:18:26.300 this impatience with Payless and

NOTE Confidence: 0.883894591875

00:18:26.370 --> 00:18:28.603 they found that when they set the

NOTE Confidence: 0.883894591875

00:18:28.603 --> 00:18:30.958 patient up and they looked at them,

NOTE Confidence: 0.883894591875

00:18:30.960 --> 00:18:32.910 you know within a month only.

NOTE Confidence: 0.742806014666667

00:18:35.180 --> 00:18:37.514 41% of them were inadequately ventilated

NOTE Confidence: 0.742806014666667

00:18:37.514 --> 00:18:40.284 and this was primarily due to upper

NOTE Confidence: 0.742806014666667

00:18:40.284 --> 00:18:42.079 airway obstruction and the important

NOTE Confidence: 0.742806014666667

00:18:42.079 --> 00:18:44.834 thing about you know this study and what

NOTE Confidence: 0.742806014666667

00:18:44.834 --> 00:18:47.536 it teaches us is that in this particular

NOTE Confidence: 0.742806014666667

00:18:47.536 --> 00:18:50.128 population if we fail to correctly

NOTE Confidence: 0.742806014666667

00:18:50.128 --> 00:18:52.651 obstruction it had quite a significant

NOTE Confidence: 0.742806014666667

00:18:52.651 --> 00:18:54.676 effect on these patients survival.

NOTE Confidence: 0.742806014666667

00:18:54.680 --> 00:18:56.960 So those patients that were

NOTE Confidence: 0.742806014666667

00:18:56.960 --> 00:18:58.328 inadequately ventilated because

NOTE Confidence: 0.742806014666667

00:18:58.328 --> 00:19:00.590 of upper airway obstruction.

NOTE Confidence: 0.742806014666667

00:19:00.590 --> 00:19:02.300 If they couldn't get that up

NOTE Confidence: 0.742806014666667

00:19:02.300 --> 00:19:03.988 in obstruction under control.

NOTE Confidence: 0.742806014666667

00:19:03.988 --> 00:19:06.784 Survival was very poor over the

NOTE Confidence: 0.742806014666667

00:19:06.784 --> 00:19:08.968 next 12 months and simply even

NOTE Confidence: 0.742806014666667

00:19:08.968 --> 00:19:10.598 those patients will help anyway,

NOTE Confidence: 0.742806014666667

00:19:10.600 --> 00:19:12.404 obstruction but really weren't

NOTE Confidence: 0.742806014666667

00:19:12.404 --> 00:19:15.110 desaturating look great deal also had

NOTE Confidence: 0.742806014666667

00:19:15.186 --> 00:19:17.341 very poor survival outcomes compared

NOTE Confidence: 0.742806014666667

00:19:17.341 --> 00:19:19.951 to those individuals who may have

NOTE Confidence: 0.742806014666667

00:19:19.951 --> 00:19:22.225 initially had up in late Struction,

NOTE Confidence: 0.742806014666667

00:19:22.230 --> 00:19:24.330 but they were able to correct it,

NOTE Confidence: 0.742806014666667

00:19:24.330 --> 00:19:27.270 which was in 58% of cases

NOTE Confidence: 0.742806014666667

00:19:27.270 --> 00:19:28.740 by adjusting ventilator.

NOTE Confidence: 0.742806014666667

00:19:28.740 --> 00:19:30.960 Their survival was far superior

NOTE Confidence: 0.742806014666667

00:19:30.960 --> 00:19:34.490 over that 12 month period.

NOTE Confidence: 0.742806014666667

00:19:34.490 --> 00:19:35.862 So when they're thinking

NOTE Confidence: 0.742806014666667

00:19:35.862 --> 00:19:37.234 about getting into patients,

NOTE Confidence: 0.742806014666667

00:19:37.240 --> 00:19:38.902 we really have to think about

NOTE Confidence: 0.742806014666667

00:19:38.902 --> 00:19:40.800 the masks that we're using and

NOTE Confidence: 0.742806014666667

00:19:40.800 --> 00:19:43.050 certainly looking at the literature,

NOTE Confidence: 0.742806014666667

00:19:43.050 --> 00:19:46.487 there has been news over the last.

NOTE Confidence: 0.742806014666667

00:19:46.490 --> 00:19:48.865 Two decades from nasal masks

NOTE Confidence: 0.742806014666667

00:19:48.865 --> 00:19:50.290 to oronasal masks,

NOTE Confidence: 0.742806014666667

00:19:50.290 --> 00:19:51.550 and certainly in our practice,

NOTE Confidence: 0.742806014666667

00:19:51.550 --> 00:19:54.224 we use a lot of oronasal masks,

NOTE Confidence: 0.742806014666667

00:19:54.230 --> 00:19:56.756 probably about 90% of our patients

NOTE Confidence: 0.742806014666667

00:19:56.756 --> 00:19:58.900 having our own nasal mask.

NOTE Confidence: 0.742806014666667

00:19:58.900 --> 00:20:01.540 The literature in general is talking

NOTE Confidence: 0.742806014666667

00:20:01.540 --> 00:20:05.650 about 75% leased the European literature,

NOTE Confidence: 0.742806014666667

00:20:05.650 --> 00:20:07.900 and we've got two very recent

NOTE Confidence: 0.742806014666667

00:20:07.900 --> 00:20:09.992 our cities showing that probably

NOTE Confidence: 0.742806014666667

00:20:09.992 --> 00:20:12.572 nasal oronasal masks are equally

NOTE Confidence: 0.742806014666667

00:20:12.572 --> 00:20:15.130 effective in patients with both

NOTE Confidence: 0.742806014666667

00:20:15.130 --> 00:20:16.660 neuromuscular conditions and.

NOTE Confidence: 0.742806014666667

00:20:16.660 --> 00:20:18.815 CRPD with respect to things

NOTE Confidence: 0.742806014666667

00:20:18.815 --> 00:20:20.970 like gas exchange and sleep,

NOTE Confidence: 0.742806014666667

00:20:20.970 --> 00:20:22.240 but it is very important.

NOTE Confidence: 0.742806014666667

00:20:22.240 --> 00:20:24.598 This can be quite considerable variation

NOTE Confidence: 0.742806014666667

00:20:24.598 --> 00:20:26.834 with some patients doing much better

NOTE Confidence: 0.742806014666667

00:20:26.834 --> 00:20:29.210 on the Mason mask and some doing much

NOTE Confidence: 0.742806014666667

00:20:29.270 --> 00:20:31.644 better with hate and orientation.

NOTE Confidence: 0.742806014666667

00:20:31.644 --> 00:20:36.390 Ask in this study out of Germany are

NOTE Confidence: 0.742806014666667

00:20:36.390 --> 00:20:39.621 pretty Young's group showing that in

NOTE Confidence: 0.742806014666667

00:20:39.621 --> 00:20:43.222 patients with non invasive ventilation there,

NOTE Confidence: 0.742806014666667

00:20:43.222 --> 00:20:45.148 particularly patients with

NOTE Confidence: 0.742806014666667

00:20:45.148 --> 00:20:47.074 neuromuscular conditions treatment.

NOTE Confidence: 0.742806014666667

00:20:47.080 --> 00:20:49.204 Associated with destruction occurred

NOTE Confidence: 0.742806014666667

00:20:49.204 --> 00:20:52.390 in about one in five individuals,

NOTE Confidence: 0.742806014666667

00:20:52.390 --> 00:20:55.576 but mainly in patients with neuromuscular

NOTE Confidence: 0.742806014666667

00:20:55.576 --> 00:20:58.566 conditions as opposed to other

NOTE Confidence: 0.742806014666667

00:20:58.566 --> 00:21:00.918 sleep hypoventilation conditions.

NOTE Confidence: 0.742806014666667

00:21:00.920 --> 00:21:03.760 And it wasn't there had a reasonable number

NOTE Confidence: 0.742806014666667

00:21:03.760 --> 00:21:06.580 of Payless patients in amongst this group,

NOTE Confidence: 0.742806014666667

00:21:06.580 --> 00:21:09.849 and the presence or absence of severe

NOTE Confidence: 0.742806014666667

00:21:09.849 --> 00:21:12.286 bulbar dysfunction didn't seem to

NOTE Confidence: 0.742806014666667

00:21:12.286 --> 00:21:14.691 influence whether or not patients

NOTE Confidence: 0.742806014666667

00:21:14.691 --> 00:21:17.180 would develop copyright substruction.

NOTE Confidence: 0.742806014666667

00:21:17.180 --> 00:21:18.610 Everything alright.

NOTE Confidence: 0.742806014666667

00:21:18.610 --> 00:21:20.040 Nasal mask.

NOTE Confidence: 0.742806014666667

00:21:20.040 --> 00:21:22.641 So we just have to remember if we are

NOTE Confidence: 0.742806014666667

00:21:22.641 --> 00:21:24.978 using these masks or removing someone

NOTE Confidence: 0.742806014666667

00:21:24.978 --> 00:21:27.715 from an Asian last oronasal that we

NOTE Confidence: 0.742806014666667

00:21:27.715 --> 00:21:30.109 can give up a distraction from that

NOTE Confidence: 0.742806014666667

00:21:30.109 --> 00:21:32.994 jewelry traction from that or a nasal mask,

NOTE Confidence: 0.742806014666667

00:21:33.000 --> 00:21:34.885 particularly in patients who have

NOTE Confidence: 0.742806014666667

00:21:34.885 --> 00:21:36.770 weakness of hypertonia of the

NOTE Confidence: 0.742806014666667

00:21:36.832 --> 00:21:38.984 tongues so we can see that it's in

NOTE Confidence: 0.742806014666667

00:21:38.984 --> 00:21:41.582 that quite a bit in patients with

NOTE Confidence: 0.742806014666667

00:21:41.582 --> 00:21:43.178 Princeton station muscular dystrophy,

NOTE Confidence: 0.742806014666667

00:21:43.180 --> 00:21:44.700 and in particular if they're

NOTE Confidence: 0.742806014666667

00:21:44.700 --> 00:21:45.916 in a supine position.

NOTE Confidence: 0.742806014666667

00:21:45.920 --> 00:21:48.224 And REM when the tongue is floppy and you

NOTE Confidence: 0.742806014666667

00:21:48.224 --> 00:21:50.770 can have high pressures during inspiration.

NOTE Confidence: 0.742806014666667

00:21:50.770 --> 00:21:53.662 Causing that blockage of the upper

NOTE Confidence: 0.742806014666667

00:21:53.662 --> 00:21:56.200 airway with that flop tongue

NOTE Confidence: 0.742806014666667

00:21:56.200 --> 00:21:58.216 said something to bear in mind.

NOTE Confidence: 0.742806014666667

00:21:58.220 --> 00:22:00.956 So let's think about then putting

NOTE Confidence: 0.742806014666667

00:22:00.956 --> 00:22:04.489 the in's and outs on more automatic.

NOTE Confidence: 0.742806014666667

00:22:04.490 --> 00:22:07.350 Where does auto titrating

NOTE Confidence: 0.742806014666667

00:22:07.350 --> 00:22:09.495 bilevel devices sit?

NOTE Confidence: 0.742806014666667

00:22:09.500 --> 00:22:11.110 Well when we think about

NOTE Confidence: 0.742806014666667

00:22:11.110 --> 00:22:12.720 volume tag or the pressure

NOTE Confidence: 0.805763464

00:22:12.786 --> 00:22:15.018 support it's a great idea in

NOTE Confidence: 0.805763464

00:22:15.018 --> 00:22:16.506 theory because hopefully these

NOTE Confidence: 0.805763464

00:22:16.577 --> 00:22:18.692 devices will adjust the pressure

NOTE Confidence: 0.805763464

00:22:18.692 --> 00:22:20.807 support so we're maintaining that.

NOTE Confidence: 0.805763464

00:22:20.810 --> 00:22:22.625 Target tidal volume irrespective of

NOTE Confidence: 0.805763464

00:22:22.625 --> 00:22:25.071 what the patient is doing in terms

NOTE Confidence: 0.805763464

00:22:25.071 --> 00:22:28.090 of sleep stage, sleep position,

NOTE Confidence: 0.805763464

00:22:28.090 --> 00:22:30.170 overtime as the patient gains,

NOTE Confidence: 0.805763464

00:22:30.170 --> 00:22:33.440 loses weight or disease progression

NOTE Confidence: 0.805763464

00:22:33.440 --> 00:22:35.894 and we have the power increasing

NOTE Confidence: 0.805763464

00:22:35.894 --> 00:22:38.398 numbers of people coming out showing

NOTE Confidence: 0.805763464

00:22:38.398 --> 00:22:41.498 it is effective in patients with COPD,

NOTE Confidence: 0.805763464

00:22:41.498 --> 00:22:42.954 obesity, hyperventilation,

NOTE Confidence: 0.805763464

00:22:42.954 --> 00:22:45.138 and neuromuscular conditions.

NOTE Confidence: 0.805763464

00:22:45.140 --> 00:22:47.168 But it is important to state

NOTE Confidence: 0.805763464

00:22:47.168 --> 00:22:48.958 that there's no evidence that

NOTE Confidence: 0.805763464

00:22:48.958 --> 00:22:50.818 these this device is actually.

NOTE Confidence: 0.805763464

00:22:50.820 --> 00:22:52.720 Giving us superior outcomes,

NOTE Confidence: 0.805763464

00:22:52.720 --> 00:22:55.570 but I think it's actually really

NOTE Confidence: 0.805763464

00:22:55.656 --> 00:22:58.368 useful option we starting to titrate

NOTE Confidence: 0.805763464

00:22:58.368 --> 00:23:01.227 or trying to optimize our patients and

NOTE Confidence: 0.805763464

00:23:01.227 --> 00:23:03.908 we do use it not on every patient.

NOTE Confidence: 0.805763464

00:23:03.908 --> 00:23:06.660 I do generally still use fixed pressure,

NOTE Confidence: 0.805763464

00:23:06.660 --> 00:23:09.468 but it's a really nice mode and an option

NOTE Confidence: 0.805763464

00:23:09.468 --> 00:23:12.125 to have or a number of individuals,

NOTE Confidence: 0.805763464

00:23:12.130 --> 00:23:15.084 and in particular we've found patients who

NOTE Confidence: 0.805763464

00:23:15.084 --> 00:23:17.738 require quite high pressures at night.

NOTE Confidence: 0.805763464

00:23:17.740 --> 00:23:21.170 Maybe for instance in can REM sleep.

NOTE Confidence: 0.805763464

00:23:21.170 --> 00:23:22.825 But they can't rate those

NOTE Confidence: 0.805763464

00:23:22.825 --> 00:23:23.818 pressures during wakefulness,

NOTE Confidence: 0.805763464

00:23:23.820 --> 00:23:26.431 and it can really help improve that

NOTE Confidence: 0.805763464

00:23:26.431 --> 00:23:28.329 comfort and acceptance of therapy.

NOTE Confidence: 0.805763464

00:23:28.330 --> 00:23:29.965 And also patients where we've

NOTE Confidence: 0.805763464

00:23:29.965 --> 00:23:32.330 got quite a bit done titration.

NOTE Confidence: 0.805763464

00:23:32.330 --> 00:23:34.738 And there's quite a lot of difference in

NOTE Confidence: 0.805763464

00:23:34.738 --> 00:23:36.509 pressure support between sleep stages.

NOTE Confidence: 0.805763464

00:23:36.510 --> 00:23:37.848 Then, I think,

NOTE Confidence: 0.805763464

00:23:37.848 --> 00:23:40.078 often only target pressure support

NOTE Confidence: 0.805763464

00:23:40.078 --> 00:23:43.368 is a low grade those individuals,

NOTE Confidence: 0.805763464

00:23:43.370 --> 00:23:47.720 but it isn't what these are not affected.

NOTE Confidence: 0.805763464

00:23:47.720 --> 00:23:50.464 Set and forget to type out black box.

NOTE Confidence: 0.805763464

00:23:50.470 --> 00:23:51.898 It's really important, Lee.

NOTE Confidence: 0.805763464

00:23:51.898 --> 00:23:52.969 How will they?

NOTE Confidence: 0.805763464

00:23:52.970 --> 00:23:55.256 This mode of therapy works depends

NOTE Confidence: 0.805763464

00:23:55.256 --> 00:23:57.560 on the targets that we've set.

NOTE Confidence: 0.805763464

00:23:57.560 --> 00:23:59.920 Understanding the limits of these

NOTE Confidence: 0.805763464

00:23:59.920 --> 00:24:02.088 devices and ensuring that we're

NOTE Confidence: 0.805763464

00:24:02.088 --> 00:24:03.958 monitoring these individuals to make

NOTE Confidence: 0.805763464

00:24:03.958 --> 00:24:06.553 sure the device is delivering what we

NOTE Confidence: 0.805763464

00:24:06.553 --> 00:24:08.659 think it supposed to vegetable drink,

NOTE Confidence: 0.805763464

00:24:08.660 --> 00:24:12.384 and the two major problems with these

NOTE Confidence: 0.805763464

00:24:12.384 --> 00:24:16.650 devices is first of all the auto titrating.

NOTE Confidence: 0.805763464

00:24:16.650 --> 00:24:19.776 Therapies is that the impact that

NOTE Confidence: 0.805763464

00:24:19.776 --> 00:24:22.560 unintentional leak can have on

NOTE Confidence: 0.805763464

00:24:22.560 --> 00:24:25.020 the effectiveness of ventilation?

NOTE Confidence: 0.805763464

00:24:25.020 --> 00:24:27.812 So you'll often see when you have these

NOTE Confidence: 0.805763464

00:24:27.812 --> 00:24:30.289 patients on non invasive ventilation.

NOTE Confidence: 0.805763464

00:24:30.290 --> 00:24:31.991 If there's a leak in the system

NOTE Confidence: 0.805763464

00:24:31.991 --> 00:24:33.040 the machine was with,

NOTE Confidence: 0.805763464

00:24:33.040 --> 00:24:35.032 a single line will start to

NOTE Confidence: 0.805763464

00:24:35.032 --> 00:24:36.960 read much higher tidal volumes.

NOTE Confidence: 0.805763464

00:24:36.960 --> 00:24:38.906 So if you've got a volume target

NOTE Confidence: 0.805763464

00:24:38.906 --> 00:24:40.062 pressure support and there's

NOTE Confidence: 0.805763464

00:24:40.062 --> 00:24:41.634 a large leak in the system,

NOTE Confidence: 0.805763464

00:24:41.640 --> 00:24:44.153 the machine will often think that the

NOTE Confidence: 0.805763464

00:24:44.153 --> 00:24:46.638 patient is getting too large and breath.

NOTE Confidence: 0.805763464

00:24:46.640 --> 00:24:48.999 It will see that high tide environment

NOTE Confidence: 0.805763464

00:24:48.999 --> 00:24:51.937 and start to reduce the pressure support.

NOTE Confidence: 0.805763464

00:24:51.940 --> 00:24:55.144 So affectively will begin to under

NOTE Confidence: 0.805763464

00:24:55.144 --> 00:24:57.880 ventilate the individual and Nugent

NOTE Confidence: 0.805763464

00:24:57.880 --> 00:25:00.463 and has done and so Joe had done a

NOTE Confidence: 0.805763464

00:25:00.463 --> 00:25:02.993 number of studies looking at that

NOTE Confidence: 0.805763464

00:25:02.993 --> 00:25:05.163 particular moment in patients using

NOTE Confidence: 0.805763464

00:25:05.237 --> 00:25:07.317 volume target pressure support

NOTE Confidence: 0.805763464

00:25:07.317 --> 00:25:08.877 modes of ventilation.

NOTE Confidence: 0.805763464

00:25:08.880 --> 00:25:11.104 The other thing we have to be really

NOTE Confidence: 0.805763464

00:25:11.104 --> 00:25:13.416 careful of is the prisons of airway

NOTE Confidence: 0.805763464

00:25:13.416 --> 00:25:15.386 obstruction that's not being properly

NOTE Confidence: 0.805763464

00:25:15.386 --> 00:25:17.370 treated because this will lead to.

NOTE Confidence: 0.805763464

00:25:17.370 --> 00:25:19.800 Ineffective ventilation as you can

NOTE Confidence: 0.805763464

00:25:19.800 --> 00:25:23.465 see in this picture here you can see

NOTE Confidence: 0.805763464

00:25:23.465 --> 00:25:26.009 the variation in the pressure the

NOTE Confidence: 0.805763464

00:25:26.009 --> 00:25:28.324 patient has upper airway obstruction,

NOTE Confidence: 0.805763464

00:25:28.330 --> 00:25:30.730 the machine and as a result of that

NOTE Confidence: 0.805763464

00:25:30.730 --> 00:25:32.810 there's a drop in tidal volume.

NOTE Confidence: 0.805763464

00:25:32.810 --> 00:25:34.958 Machine tries to ramp the pressure

NOTE Confidence: 0.805763464

00:25:34.958 --> 00:25:36.390 up the patient because

NOTE Confidence: 0.874987417647059

00:25:36.456 --> 00:25:38.528 at the end of the extraction then

NOTE Confidence: 0.874987417647059

00:25:38.530 --> 00:25:41.068 arouses takes a few deep breaths.

NOTE Confidence: 0.874987417647059

00:25:41.070 --> 00:25:43.422 They now over ventilated so boring

NOTE Confidence: 0.874987417647059

00:25:43.422 --> 00:25:45.889 machine takes the pressure support down.

NOTE Confidence: 0.874987417647059

00:25:45.890 --> 00:25:47.717 The patient goes back off to sleep.

NOTE Confidence: 0.874987417647059

00:25:47.720 --> 00:25:49.622 The obstruction occurs again and then

NOTE Confidence: 0.874987417647059

00:25:49.622 --> 00:25:52.315 we can get the entire period time

NOTE Confidence: 0.874987417647059

00:25:52.315 --> 00:25:54.127 with this repetitive obstruction.

NOTE Confidence: 0.874987417647059

00:25:54.130 --> 00:25:57.368 Variations and tidal volume and minute

NOTE Confidence: 0.874987417647059

00:25:57.368 --> 00:25:59.800 ventilation and potentially quite

NOTE Confidence: 0.874987417647059

00:25:59.800 --> 00:26:03.512 high tidal volumes with not lead

NOTE Confidence: 0.874987417647059

00:26:03.512 --> 00:26:06.056 into effective dentistry support.

NOTE Confidence: 0.874987417647059

00:26:06.060 --> 00:26:08.685 And so we know that persisting at

NOTE Confidence: 0.874987417647059

00:26:08.685 --> 00:26:10.820 the airway obstruction can impact

NOTE Confidence: 0.874987417647059

00:26:10.820 --> 00:26:12.846 both ventilation, gas exchange,

NOTE Confidence: 0.874987417647059

00:26:12.846 --> 00:26:13.932 sleep quality,

NOTE Confidence: 0.874987417647059

00:26:13.932 --> 00:26:17.190 and in some patients even survival.

NOTE Confidence: 0.874987417647059

00:26:17.190 --> 00:26:18.960 But for many of these individuals,

NOTE Confidence: 0.874987417647059

00:26:18.960 --> 00:26:22.248 that high pets not required continuously,

NOTE Confidence: 0.874987417647059

00:26:22.250 --> 00:26:25.016 so the availability of the auto

NOTE Confidence: 0.874987417647059

00:26:25.016 --> 00:26:28.180 epac modes can be quite useful.

NOTE Confidence: 0.874987417647059

00:26:28.180 --> 00:26:30.679 You know this may present in some

NOTE Confidence: 0.874987417647059

00:26:30.679 --> 00:26:33.606 machines as auto AE or auto epap,

NOTE Confidence: 0.874987417647059

00:26:33.606 --> 00:26:36.390 or it could be automated airway.

NOTE Confidence: 0.874987417647059

00:26:36.390 --> 00:26:38.718 Management in other devices and the

NOTE Confidence: 0.874987417647059

00:26:38.718 --> 00:26:42.204 idea of this has been under set that

NOTE Confidence: 0.874987417647059

00:26:42.204 --> 00:26:44.524 minimum and maximum impact pressure.

NOTE Confidence: 0.874987417647059

00:26:44.530 --> 00:26:46.931 So the machine now has the capability

NOTE Confidence: 0.874987417647059

00:26:46.931 --> 00:26:49.503 of not only increasing and hopefully

NOTE Confidence: 0.874987417647059

00:26:49.503 --> 00:26:51.953 very impressed support in response

NOTE Confidence: 0.874987417647059

00:26:51.953 --> 00:26:54.799 to hypoxia or low tidal volume

NOTE Confidence: 0.874987417647059

00:26:54.799 --> 00:26:56.591 associated with non obstructive

NOTE Confidence: 0.874987417647059

00:26:56.591 --> 00:26:59.458 had partners but also increasing

NOTE Confidence: 0.874987417647059

00:26:59.458 --> 00:27:03.466 EPAC to manage that hypoxemia or

NOTE Confidence: 0.874987417647059

00:27:03.466 --> 00:27:07.096 obstruction caused by airway closure.

NOTE Confidence: 0.874987417647059

00:27:07.100 --> 00:27:08.024 But of course,

NOTE Confidence: 0.874987417647059

00:27:08.024 --> 00:27:09.872 we're not relying on these devices

NOTE Confidence: 0.874987417647059

00:27:09.872 --> 00:27:11.897 and the algorithms within them to

NOTE Confidence: 0.874987417647059

00:27:11.897 --> 00:27:14.035 be good enough to recognize mental

NOTE Confidence: 0.874987417647059

00:27:14.035 --> 00:27:16.120 power increase pressures at quarter,

NOTE Confidence: 0.874987417647059

00:27:16.120 --> 00:27:18.286 and went increasingly pack in response

NOTE Confidence: 0.874987417647059

00:27:18.286 --> 00:27:20.649 to that drop and tidal volume,

NOTE Confidence: 0.874987417647059

00:27:20.650 --> 00:27:23.350 whether it's related to obstruction

NOTE Confidence: 0.874987417647059

00:27:23.350 --> 00:27:24.970 or non obstruction.

NOTE Confidence: 0.874987417647059

00:27:24.970 --> 00:27:26.810 And we have two papers,

NOTE Confidence: 0.874987417647059

00:27:26.810 --> 00:27:30.874 one out of five WA with Nigel regardless

NOTE Confidence: 0.874987417647059

00:27:30.874 --> 00:27:34.438 group and also here in the states.

NOTE Confidence: 0.874987417647059

00:27:34.440 --> 00:27:38.899 Looking at the use of auto ipat

NOTE Confidence: 0.874987417647059

00:27:38.900 --> 00:27:40.692 during PSG guided titrations.

NOTE Confidence: 0.874987417647059

00:27:40.692 --> 00:27:43.380 And both of these studies used

NOTE Confidence: 0.874987417647059

00:27:43.460 --> 00:27:45.910 patients who were already used

NOTE Confidence: 0.874987417647059

00:27:45.910 --> 00:27:47.870 to non invasive ventilation,

NOTE Confidence: 0.874987417647059

00:27:47.870 --> 00:27:50.462 so these were not naive to to therapy

NOTE Confidence: 0.874987417647059

00:27:50.462 --> 00:27:53.230 and what both of these studies showed.

NOTE Confidence: 0.874987417647059

00:27:53.230 --> 00:27:55.498 Whether you're looking at a hi.

NOTE Confidence: 0.874987417647059

00:27:55.500 --> 00:27:58.860 Looking at ody that the use of these

NOTE Confidence: 0.874987417647059

00:27:58.860 --> 00:28:02.360 auto ipet modes of people that support

NOTE Confidence: 0.874987417647059

00:28:02.360 --> 00:28:05.748 we're not in power inferior to PS

NOTE Confidence: 0.874987417647059

00:28:05.748 --> 00:28:07.869 she carded using fixed pressure,

NOTE Confidence: 0.874987417647059

00:28:07.869 --> 00:28:11.110 but particularly look at the Mikado paper.

NOTE Confidence: 0.874987417647059

00:28:11.110 --> 00:28:14.074 You can see there's quite variable

NOTE Confidence: 0.874987417647059

00:28:14.074 --> 00:28:16.878 individual response to whether another

NOTE Confidence: 0.874987417647059

00:28:16.878 --> 00:28:20.736 patient responds better to the auto E

NOTE Confidence: 0.874987417647059

00:28:20.736 --> 00:28:23.970 pack or two A2 affixed to a fixed pressure,

NOTE Confidence: 0.874987417647059

00:28:23.970 --> 00:28:26.504 and unfortunately in their paper they wasn't.

NOTE Confidence: 0.874987417647059

00:28:26.510 --> 00:28:28.745 Large enough numbers under different

NOTE Confidence: 0.874987417647059

00:28:28.745 --> 00:28:30.980 diagnostic groups to work out

NOTE Confidence: 0.874987417647059

00:28:31.051 --> 00:28:32.981 any pattern of which patients

NOTE Confidence: 0.874987417647059

00:28:32.981 --> 00:28:35.340 might respond better to the fixed

NOTE Confidence: 0.874987417647059

00:28:35.340 --> 00:28:37.488 versus an auto titrating a pet.

NOTE Confidence: 0.874987417647059

00:28:37.490 --> 00:28:40.382 And we also don't have longer

NOTE Confidence: 0.874987417647059

00:28:40.382 --> 00:28:43.094 term information about how these

NOTE Confidence: 0.874987417647059

00:28:43.094 --> 00:28:47.168 this mode of setting a PAP.

NOTE Confidence: 0.874987417647059

00:28:47.170 --> 00:28:49.470 Works in the longer term.

NOTE Confidence: 0.874987417647059

00:28:49.470 --> 00:28:50.774 Some of those additional

NOTE Confidence: 0.874987417647059

00:28:50.774 --> 00:28:52.404 settings things like rise time.

NOTE Confidence: 0.874987417647059

00:28:52.410 --> 00:28:54.450 It can be incredibly important in

NOTE Confidence: 0.874987417647059

00:28:54.450 --> 00:28:56.484 terms of patient comfort and given

NOTE Confidence: 0.874987417647059

00:28:56.484 --> 00:28:58.624 the air into patients so that you

NOTE Confidence: 0.874987417647059

00:28:58.624 --> 00:29:00.780 know the rise times how fast that

NOTE Confidence: 0.874987417647059

00:29:00.854 --> 00:29:02.804 E Peppers going Oakley pressure

NOTE Confidence: 0.874987417647059

00:29:02.804 --> 00:29:05.379 support is going for epub to iPad.

NOTE Confidence: 0.874987417647059

00:29:05.380 --> 00:29:07.490 And depending on the device

NOTE Confidence: 0.874987417647059

00:29:07.490 --> 00:29:09.178 within numerical time scale,

NOTE Confidence: 0.874987417647059

00:29:09.180 --> 00:29:10.536 so generally speaking,

NOTE Confidence: 0.874987417647059

00:29:10.536 --> 00:29:13.300 patients with COPD prefer that faster

NOTE Confidence: 0.874987417647059

00:29:13.300 --> 00:29:15.625 pressurisation in particular compared to.

NOTE Confidence: 0.752227771818182

00:29:15.630 --> 00:29:17.597 If you look at a patient with

NOTE Confidence: 0.752227771818182

00:29:17.597 --> 00:29:19.200 a new mushkilat conditions.

NOTE Confidence: 0.752227771818182

00:29:19.200 --> 00:29:21.248 So what we're trying to do with that

NOTE Confidence: 0.752227771818182

00:29:21.248 --> 00:29:23.100 rise time is matched the patient

NOTE Confidence: 0.752227771818182

00:29:23.100 --> 00:29:25.563 speaking spirit reflow so his COPD

NOTE Confidence: 0.752227771818182

00:29:25.563 --> 00:29:29.211 patients generally prefer that the

NOTE Confidence: 0.752227771818182

00:29:29.211 --> 00:29:32.092 higher the faster pressurization life.

NOTE Confidence: 0.752227771818182

00:29:32.092 --> 00:29:33.260 It is too fast.

NOTE Confidence: 0.752227771818182

00:29:33.260 --> 00:29:35.384 It can be quite uncomfortable for

NOTE Confidence: 0.752227771818182

00:29:35.384 --> 00:29:37.656 the patient and create these very

NOTE Confidence: 0.752227771818182

00:29:37.656 --> 00:29:40.400 high and unnecessary peak flows and a

NOTE Confidence: 0.752227771818182

00:29:40.400 --> 00:29:42.214 neuromuscular patient for neuromuscular

NOTE Confidence: 0.752227771818182

00:29:42.214 --> 00:29:44.914 condition is likely to complain about.

NOTE Confidence: 0.752227771818182

00:29:44.920 --> 00:29:46.510 You know the pressure being too

NOTE Confidence: 0.752227771818182

00:29:46.510 --> 00:29:48.372 high even if the pressure is

NOTE Confidence: 0.752227771818182

00:29:48.372 --> 00:29:49.848 actually set relatively low.

NOTE Confidence: 0.752227771818182

00:29:49.850 --> 00:29:52.002 It's a flow rate at them is just

NOTE Confidence: 0.752227771818182

00:29:52.002 --> 00:29:53.886 too hot and it is too high.

NOTE Confidence: 0.752227771818182

00:29:53.890 --> 00:29:55.708 You often get this little peek

NOTE Confidence: 0.752227771818182

00:29:55.708 --> 00:29:57.610 on the on the pressure,

NOTE Confidence: 0.752227771818182

00:29:57.610 --> 00:29:59.275 just indicating that they're being

NOTE Confidence: 0.752227771818182

00:29:59.275 --> 00:30:02.288 hit in the face a little bit too hard.

NOTE Confidence: 0.752227771818182

00:30:02.290 --> 00:30:03.154 On the other hand,

NOTE Confidence: 0.752227771818182

00:30:03.154 --> 00:30:05.349 if he said it too slow and the patient,

NOTE Confidence: 0.752227771818182

00:30:05.350 --> 00:30:06.754 particularly those with COPD,

NOTE Confidence: 0.752227771818182

00:30:06.754 --> 00:30:08.509 will fill up their suffocating,

NOTE Confidence: 0.752227771818182

00:30:08.510 --> 00:30:11.978 they just were not matching their

NOTE Confidence: 0.752227771818182

00:30:11.978 --> 00:30:14.315 inspiratory peak inspiratory demands

NOTE Confidence: 0.752227771818182

00:30:14.315 --> 00:30:17.825 and can be quite uncomfortable for.

NOTE Confidence: 0.752227771818182

00:30:17.830 --> 00:30:20.566 So it's not just about comfort,

NOTE Confidence: 0.752227771818182

00:30:20.570 --> 00:30:22.908 it can also impact on tidal volume.

NOTE Confidence: 0.752227771818182

00:30:22.910 --> 00:30:25.002 Pan in this illustration.

NOTE Confidence: 0.752227771818182

00:30:25.002 --> 00:30:28.200 Here it is a an exaggeration,

NOTE Confidence: 0.752227771818182

00:30:28.200 --> 00:30:31.690 but you can see that the green

NOTE Confidence: 0.752227771818182

00:30:31.690 --> 00:30:34.280 arrow in the top panel with the

NOTE Confidence: 0.752227771818182

00:30:34.280 --> 00:30:36.350 rise time with 100 mills.

NOTE Confidence: 0.752227771818182

00:30:36.350 --> 00:30:38.352 If you look at that, sorry 100 milliseconds.

NOTE Confidence: 0.752227771818182

00:30:38.352 --> 00:30:40.550 You can see the tidal volume here.

NOTE Confidence: 0.752227771818182

00:30:40.550 --> 00:30:42.968 It's close to about 500 mills,

NOTE Confidence: 0.752227771818182

00:30:42.970 --> 00:30:45.688 keeping all the settings exactly the

NOTE Confidence: 0.752227771818182

00:30:45.688 --> 00:30:48.758 same could change the rise time to 7.

NOTE Confidence: 0.752227771818182

00:30:48.760 --> 00:30:50.552 190 seconds you get,

NOTE Confidence: 0.752227771818182

00:30:50.552 --> 00:30:51.448 you know,

NOTE Confidence: 0.752227771818182

00:30:51.450 --> 00:30:54.562 just over 100 mil drop in tidal volume

NOTE Confidence: 0.752227771818182

00:30:54.562 --> 00:30:56.716 because there's less area under that

NOTE Confidence: 0.752227771818182

00:30:56.716 --> 00:31:00.040 that curve to to give us that title volume.

NOTE Confidence: 0.752227771818182

00:31:00.040 --> 00:31:03.281 So thinking about as we change particularly

NOTE Confidence: 0.752227771818182

00:31:03.281 --> 00:31:06.097 make large changes in the right time,

NOTE Confidence: 0.752227771818182

00:31:06.100 --> 00:31:08.210 help may impact on cattle.

NOTE Confidence: 0.851448454

00:31:10.290 --> 00:31:14.151 Inspiratory times settings can be very

NOTE Confidence: 0.851448454

00:31:14.151 --> 00:31:15.957 important to make sure that we're

NOTE Confidence: 0.851448454

00:31:15.957 --> 00:31:17.751 matching what the machine is doing

NOTE Confidence: 0.851448454

00:31:17.751 --> 00:31:19.704 to what the patient is is required.

NOTE Confidence: 0.851448454

00:31:19.710 --> 00:31:22.335 So generally speaking in machine

NOTE Confidence: 0.851448454

00:31:22.335 --> 00:31:25.896 deluded Brits, we need to to set up a

NOTE Confidence: 0.851448454

00:31:25.900 --> 00:31:29.338 machine at A TI inspiratory tonight,

NOTE Confidence: 0.851448454

00:31:29.340 --> 00:31:32.133 but there are now a number of

NOTE Confidence: 0.851448454

00:31:32.133 --> 00:31:34.400 devices where we can also set

NOTE Confidence: 0.851448454

00:31:34.400 --> 00:31:36.740 a T and wind and less feature,

NOTE Confidence: 0.851448454

00:31:36.740 --> 00:31:38.960 and this is clearly really useful

NOTE Confidence: 0.851448454

00:31:38.960 --> 00:31:40.680 where we're trying to match.

NOTE Confidence: 0.851448454

00:31:40.680 --> 00:31:44.082 Machine is doing to the patients neural

NOTE Confidence: 0.851448454

00:31:44.082 --> 00:31:46.656 time and so when we think about the

NOTE Confidence: 0.851448454

00:31:46.656 --> 00:31:49.572 T I'm in there trying to make sure

NOTE Confidence: 0.851448454

00:31:49.572 --> 00:31:52.517 that the when the patient triggers the

NOTE Confidence: 0.851448454

00:31:52.517 --> 00:31:55.265 breath that inspiration is going to

NOTE Confidence: 0.851448454

00:31:55.270 --> 00:31:58.350 occur for at least a minimum period of

NOTE Confidence: 0.851448454

00:31:58.350 --> 00:32:01.728 time to get that chest wall expansion,

NOTE Confidence: 0.851448454

00:32:01.730 --> 00:32:05.674 which is very useful in patients with pay

NOTE Confidence: 0.851448454

00:32:05.674 --> 00:32:08.960 with restrictive lung languages for pology.

NOTE Confidence: 0.851448454

00:32:08.960 --> 00:32:10.654 On the other hand, the T IMAX.

NOTE Confidence: 0.851448454

00:32:10.660 --> 00:32:14.593 Is it's really a limit or security to make

NOTE Confidence: 0.851448454

00:32:14.593 --> 00:32:17.556 sure that the machine will not continue

NOTE Confidence: 0.851448454

00:32:17.556 --> 00:32:20.180 on inspiration beyond what is reasonable,

NOTE Confidence: 0.851448454

00:32:20.180 --> 00:32:22.405 sensible for that particular patient.

NOTE Confidence: 0.851448454

00:32:22.410 --> 00:32:24.455 If, for whatever reason particularly

NOTE Confidence: 0.851448454

00:32:24.455 --> 00:32:26.982 are either long mechanics or lick

NOTE Confidence: 0.851448454

00:32:26.982 --> 00:32:29.077 that presets are conflict criteria,

NOTE Confidence: 0.851448454

00:32:29.080 --> 00:32:32.660 is not met by the machine having the T IMAX,

NOTE Confidence: 0.851448454

00:32:32.660 --> 00:32:35.692 is that surety to make sure that we

NOTE Confidence: 0.851448454

00:32:35.692 --> 00:32:38.756 haven't gotten inspiratory enough so in

NOTE Confidence: 0.851448454

00:32:38.756 --> 00:32:41.804 patients with chest wall lungs restriction?

NOTE Confidence: 0.851448454

00:32:41.810 --> 00:32:43.550 They just generally have a tendency.

NOTE Confidence: 0.851448454

00:32:43.550 --> 00:32:47.838 Because of that apology to cycle off early,

NOTE Confidence: 0.851448454

00:32:47.840 --> 00:32:49.975 and so we've got the TIF machine.

NOTE Confidence: 0.851448454

00:32:49.980 --> 00:32:52.269 It is often much shorter than what

NOTE Confidence: 0.851448454

00:32:52.269 --> 00:32:53.954 the patients new runtime they'd

NOTE Confidence: 0.851448454

00:32:53.954 --> 00:32:56.468 love to take a longer break in a

NOTE Confidence: 0.851448454

00:32:56.468 --> 00:32:57.808 bigger and better tidal volume,

NOTE Confidence: 0.851448454

00:32:57.810 --> 00:33:00.250 but there longer canix just won't let them.

NOTE Confidence: 0.851448454

00:33:00.250 --> 00:33:02.980 And if the machines following their

NOTE Confidence: 0.851448454

00:33:02.980 --> 00:33:04.345 respiratory inspiratory flow,

NOTE Confidence: 0.851448454

00:33:04.350 --> 00:33:06.096 we're going to get that very

NOTE Confidence: 0.851448454

00:33:06.096 --> 00:33:06.969 short inspiratory time,

NOTE Confidence: 0.851448454

00:33:06.970 --> 00:33:08.382 which can be uncomfortable.

NOTE Confidence: 0.851448454

00:33:08.382 --> 00:33:10.961 And we're going to get title volumes

NOTE Confidence: 0.851448454

00:33:10.961 --> 00:33:12.906 that are less than desirable.

NOTE Confidence: 0.851448454

00:33:12.910 --> 00:33:16.614 So we can increase the T I'm in.

NOTE Confidence: 0.851448454

00:33:16.620 --> 00:33:18.510 In those in that particular case,

NOTE Confidence: 0.851448454

00:33:18.510 --> 00:33:21.006 or maybe set a the cycle of less

NOTE Confidence: 0.851448454

00:33:21.006 --> 00:33:23.152 sensitive to allow the machine to

NOTE Confidence: 0.851448454

00:33:23.152 --> 00:33:25.318 go out and terminate that cycle

NOTE Confidence: 0.851448454

00:33:25.393 --> 00:33:27.338 at a slightly longer period.

NOTE Confidence: 0.851448454

00:33:27.340 --> 00:33:29.900 So this is an illustration here of the

NOTE Confidence: 0.851448454

00:33:29.900 --> 00:33:32.436 patient that we had in the sleep laboratory,

NOTE Confidence: 0.851448454

00:33:32.436 --> 00:33:35.526 and this is a patient who had a

NOTE Confidence: 0.851448454

00:33:35.526 --> 00:33:36.981 restrictive chest wall disorder.

NOTE Confidence: 0.851448454

00:33:36.981 --> 00:33:39.793 Very short that I TE ratio is just

NOTE Confidence: 0.851448454

00:33:39.793 --> 00:33:41.977 too short by pushing out the T.

NOTE Confidence: 0.851448454

00:33:41.980 --> 00:33:43.850 I'm in getting much better.

NOTE Confidence: 0.85495528

00:33:46.030 --> 00:33:47.580 Inspiratory times and much more.

NOTE Confidence: 0.85495528

00:33:47.580 --> 00:33:49.100 Comfortable for the patient.

NOTE Confidence: 0.85495528

00:33:49.100 --> 00:33:50.620 On the other hand,

NOTE Confidence: 0.85495528

00:33:50.620 --> 00:33:52.894 we also don't want to push

NOTE Confidence: 0.85495528

00:33:52.894 --> 00:33:54.410 the minimum inspiratory time

NOTE Confidence: 0.85495528

00:33:54.481 --> 00:33:56.476 out too far for a patient in.

NOTE Confidence: 0.85495528

00:33:56.480 --> 00:33:58.594 You really wants to already breathe that,

NOTE Confidence: 0.85495528

00:33:58.600 --> 00:34:01.456 and you can see here the patient

NOTE Confidence: 0.85495528

00:34:01.456 --> 00:34:04.195 they flow is has is decreasing,

NOTE Confidence: 0.85495528

00:34:04.195 --> 00:34:07.730 but the machine is still maintaining that

NOTE Confidence: 0.85495528

00:34:07.814 --> 00:34:10.990 inspiratory flow that dealt with the iPad,

NOTE Confidence: 0.85495528

00:34:10.990 --> 00:34:12.556 and that can be again very

NOTE Confidence: 0.85495528

00:34:12.556 --> 00:34:13.600 uncomfortable for the patient.

NOTE Confidence: 0.85495528

00:34:13.600 --> 00:34:15.490 So you might see something like that.

NOTE Confidence: 0.85495528

00:34:15.490 --> 00:34:18.354 In the pic you set that ER minimum

NOTE Confidence: 0.85495528

00:34:18.354 --> 00:34:20.538 too long in obstructive lung disease,

NOTE Confidence: 0.85495528

00:34:20.538 --> 00:34:22.740 they often have the opposite problem.

NOTE Confidence: 0.85495528

00:34:22.740 --> 00:34:25.108 They have a tendency because of their long

NOTE Confidence: 0.85495528

00:34:25.108 --> 00:34:27.369 mechanics to have a delay in their cycling,

NOTE Confidence: 0.85495528

00:34:27.370 --> 00:34:31.810 so they have a prolonged TI compared to

NOTE Confidence: 0.85495528

00:34:31.810 --> 00:34:33.850 with the machine compared to Murali.

NOTE Confidence: 0.85495528

00:34:33.850 --> 00:34:36.290 What they would ideally like to do so

NOTE Confidence: 0.85495528

00:34:36.290 --> 00:34:38.464 again it can be very uncomfortable

NOTE Confidence: 0.85495528

00:34:38.464 --> 00:34:40.696 and we've got this patient who

NOTE Confidence: 0.85495528

00:34:40.767 --> 00:34:44.080 is prone to hyperinflation.

NOTE Confidence: 0.85495528

00:34:44.080 --> 00:34:45.950 Having difficulty trying to exhale

NOTE Confidence: 0.85495528

00:34:45.950 --> 00:34:48.204 out and they because they've got

NOTE Confidence: 0.85495528

00:34:48.204 --> 00:34:49.789 less time for breathing out.

NOTE Confidence: 0.85495528

00:34:49.790 --> 00:34:52.368 As you can see here in the illustration

NOTE Confidence: 0.85495528

00:34:52.368 --> 00:34:54.814 at the bottom of the page where the

NOTE Confidence: 0.85495528

00:34:54.814 --> 00:34:56.656 patient is trying to breathe out.

NOTE Confidence: 0.85495528

00:34:56.660 --> 00:34:58.028 If you look at the flow,

NOTE Confidence: 0.85495528

00:34:58.030 --> 00:34:59.980 but the machine is getting hung

NOTE Confidence: 0.85495528

00:34:59.980 --> 00:35:00.955 up on inspiration,

NOTE Confidence: 0.85495528

00:35:00.960 --> 00:35:03.250 and that's actually then impacting

NOTE Confidence: 0.85495528

00:35:03.250 --> 00:35:06.251 and you can see ineffective efforts

NOTE Confidence: 0.85495528

00:35:06.251 --> 00:35:08.236 occurring along with problems

NOTE Confidence: 0.85495528

00:35:08.236 --> 00:35:10.496 of that inspiratory hang up.

NOTE Confidence: 0.85495528

00:35:10.500 --> 00:35:14.388 So this is an illustration of where we.

NOTE Confidence: 0.85495528

00:35:14.390 --> 00:35:17.022 Limit the TR Max on that individual

NOTE Confidence: 0.85495528

00:35:17.022 --> 00:35:19.257 to what their normal neural

NOTE Confidence: 0.85495528

00:35:19.257 --> 00:35:20.928 neural inspiratory time is.

NOTE Confidence: 0.85495528

00:35:20.928 --> 00:35:23.244 We're going to get much better

NOTE Confidence: 0.85495528

00:35:23.244 --> 00:35:26.530 patient ventilator synchronization,

NOTE Confidence: 0.85495528

00:35:26.530 --> 00:35:30.148 so let's think about inpatient versus

NOTE Confidence: 0.85495528

00:35:30.148 --> 00:35:32.560 outpatient initiation of therapy,

NOTE Confidence: 0.85495528

00:35:32.560 --> 00:35:34.126 and certainly I think it was

NOTE Confidence: 0.85495528

00:35:34.126 --> 00:35:35.170 only a decade ago.

NOTE Confidence: 0.85495528

00:35:35.170 --> 00:35:38.758 Is that the best clinical practices

NOTE Confidence: 0.85495528

00:35:38.758 --> 00:35:41.865 for sleep hypoventilation and

NOTE Confidence: 0.85495528

00:35:41.865 --> 00:35:45.205 the titration was published?

NOTE Confidence: 0.85495528

00:35:45.210 --> 00:35:48.186 And in that, in those guidelines,

NOTE Confidence: 0.85495528

00:35:48.190 --> 00:35:51.886 PSG was the recommended approach to

NOTE Confidence: 0.85495528

00:35:51.890 --> 00:35:54.400 titrating long base ventilation with

NOTE Confidence: 0.85495528

00:35:54.400 --> 00:35:56.910 the authors of that publication,

NOTE Confidence: 0.85495528

00:35:56.910 --> 00:35:58.975 saying that you attended titration

NOTE Confidence: 0.85495528

00:35:58.975 --> 00:36:01.664 with the PSG and there's definitive

NOTE Confidence: 0.85495528

00:36:01.664 --> 00:36:03.844 identification of an adequate

NOTE Confidence: 0.85495528

00:36:03.844 --> 00:36:06.024 level of ventilatory support,

NOTE Confidence: 0.85495528

00:36:06.030 --> 00:36:07.878 so that was only a decade ago,

NOTE Confidence: 0.85495528

00:36:07.880 --> 00:36:10.970 but certainly technology has really moved

NOTE Confidence: 0.85495528

00:36:10.970 --> 00:36:15.464 on in that period of time in a study.

NOTE Confidence: 0.85495528

00:36:15.464 --> 00:36:18.354 Looking at PSG versus outpatient

NOTE Confidence: 0.85495528

00:36:18.354 --> 00:36:22.140 setup with Molly basic ventilation,

NOTE Confidence: 0.85495528

00:36:22.140 --> 00:36:25.315 this group Australian group down

NOTE Confidence: 0.85495528

00:36:25.315 --> 00:36:27.892 from Victoria Leader for being

NOTE Confidence: 0.85495528

00:36:27.892 --> 00:36:30.930 Hannon looked at 60 in Ivy naive.

NOTE Confidence: 0.85495528

00:36:30.930 --> 00:36:33.594 Mark enabling made patients

NOTE Confidence: 0.85495528

00:36:33.594 --> 00:36:36.258 most of those had.

NOTE Confidence: 0.85495528

00:36:36.260 --> 00:36:40.184 Turn off master that problem and what

NOTE Confidence: 0.85495528

00:36:40.184 --> 00:36:42.508 they did was all the patients came

NOTE Confidence: 0.85495528

00:36:42.508 --> 00:36:44.990 in and had a daytime titration and

NOTE Confidence: 0.85495528

00:36:44.990 --> 00:36:47.752 and then we send home to acclimatize

NOTE Confidence: 0.85495528

00:36:47.752 --> 00:36:50.065 to therapy and then came back at

NOTE Confidence: 0.85495528

00:36:50.065 --> 00:36:51.893 roughly two or three weeks later

NOTE Confidence: 0.85495528

00:36:51.893 --> 00:36:53.777 when they at least starting to

NOTE Confidence: 0.85495528

00:36:53.777 --> 00:36:55.704 use the machine and they underwent

NOTE Confidence: 0.85495528

00:36:55.704 --> 00:36:57.860 either a sham PSG where they had

NOTE Confidence: 0.85495528

00:36:57.860 --> 00:36:59.200 all the leads could on.

NOTE Confidence: 0.85495528

00:36:59.200 --> 00:37:00.675 But when they're in there

NOTE Confidence: 0.85495528

00:37:00.675 --> 00:37:01.855 nobody touched the settings.

NOTE Confidence: 0.85495528

00:37:01.860 --> 00:37:03.864 The settings overnight where exactly the

NOTE Confidence: 0.85495528

00:37:03.864 --> 00:37:06.728 same that had been set up during the daytime.

NOTE Confidence: 0.85495528

00:37:06.730 --> 00:37:09.868 All the patients underwent some titration

NOTE Confidence: 0.85495528

00:37:09.868 --> 00:37:13.420 of settings during that particular study,

NOTE Confidence: 0.85495528

00:37:13.420 --> 00:37:15.260 and then the patients were

NOTE Confidence: 0.85495528

00:37:15.260 --> 00:37:17.100 again reviewed with the PSG

NOTE Confidence: 0.856653341176471

00:37:17.170 --> 00:37:20.166 somewhere between six and eight weeks later,

NOTE Confidence: 0.856653341176471

00:37:20.170 --> 00:37:23.978 and what this study showed that while the

NOTE Confidence: 0.856653341176471

00:37:23.978 --> 00:37:26.908 individuals that underwent the sham PSG,

NOTE Confidence: 0.856653341176471

00:37:26.910 --> 00:37:31.011 when they were reviewed at roughly about

NOTE Confidence: 0.856653341176471

00:37:31.011 --> 00:37:35.755 10 weeks of therapy use, they had much

NOTE Confidence: 0.856653341176471

00:37:35.755 --> 00:37:38.295 higher patient ventilator asynchrony.

NOTE Confidence: 0.856653341176471

00:37:38.300 --> 00:37:40.598 Index there was no difference between

NOTE Confidence: 0.856653341176471

00:37:40.598 --> 00:37:43.365 the groups in terms of their arousal

NOTE Confidence: 0.856653341176471

00:37:43.365 --> 00:37:45.300 index during the SLEEP study.

NOTE Confidence: 0.856653341176471

00:37:45.300 --> 00:37:47.533 Any other aspects of the SLEEP study

NOTE Confidence: 0.856653341176471

00:37:47.533 --> 00:37:49.837 and there is also no difference

NOTE Confidence: 0.856653341176471

00:37:49.837 --> 00:37:51.957 in their compliance with therapy,

NOTE Confidence: 0.856653341176471

00:37:51.960 --> 00:37:54.984 their level of daytime,

NOTE Confidence: 0.856653341176471

00:37:54.984 --> 00:37:57.642 CO2 sleepiness, sleep quality,

NOTE Confidence: 0.856653341176471

00:37:57.642 --> 00:37:59.926 or nocturnal gas exchange.

NOTE Confidence: 0.856653341176471

00:37:59.930 --> 00:38:02.462 And but the interesting thing that

NOTE Confidence: 0.856653341176471

00:38:02.462 --> 00:38:05.470 came out this paper was that those

NOTE Confidence: 0.856653341176471

00:38:05.470 --> 00:38:08.368 individuals are in the sham PSG group.

NOTE Confidence: 0.856653341176471

00:38:08.370 --> 00:38:11.506 We just had the daytime titration only

NOTE Confidence: 0.856653341176471

00:38:11.506 --> 00:38:14.922 who were very poor users of therapy.

NOTE Confidence: 0.856653341176471

00:38:14.930 --> 00:38:17.590 So less than four hours a night.

NOTE Confidence: 0.856653341176471

00:38:17.590 --> 00:38:20.544 When they were reviewed at 10 weeks,

NOTE Confidence: 0.856653341176471

00:38:20.550 --> 00:38:23.018 they hadn't hadn't improved

NOTE Confidence: 0.856653341176471

00:38:23.018 --> 00:38:24.869 their compliance whatsoever.

NOTE Confidence: 0.856653341176471

00:38:24.870 --> 00:38:25.838 In contrast,

NOTE Confidence: 0.856653341176471

00:38:25.838 --> 00:38:28.742 those individuals that had the PSG

NOTE Confidence: 0.856653341176471

00:38:28.742 --> 00:38:32.291 titration who had been for users increase

NOTE Confidence: 0.856653341176471

00:38:32.291 --> 00:38:34.791 their usage among basic ventilation

NOTE Confidence: 0.856653341176471

00:38:34.870 --> 00:38:37.406 by by almost an hour and a half.

NOTE Confidence: 0.856653341176471

00:38:37.410 --> 00:38:38.960 So he really suggesting that

NOTE Confidence: 0.856653341176471

00:38:38.960 --> 00:38:41.030 PSG is one of those things,

NOTE Confidence: 0.856653341176471

00:38:41.030 --> 00:38:43.190 and and certainly something that we

NOTE Confidence: 0.856653341176471

00:38:43.190 --> 00:38:46.236 do is using it for patients who are

NOTE Confidence: 0.856653341176471

00:38:46.236 --> 00:38:48.528 not responding well to our date.

NOTE Confidence: 0.856653341176471

00:38:48.530 --> 00:38:51.884 That's where we would use the PSG

NOTE Confidence: 0.856653341176471

00:38:51.884 --> 00:38:55.328 to try and titrate and understand

NOTE Confidence: 0.856653341176471

00:38:55.328 --> 00:38:58.203 better what is about ventilatory

NOTE Confidence: 0.856653341176471

00:38:58.203 --> 00:39:01.584 support that the patient is just not

NOTE Confidence: 0.856653341176471

00:39:01.584 --> 00:39:04.736 comfortable and not using it so patient

NOTE Confidence: 0.856653341176471

00:39:04.736 --> 00:39:07.277 comfort on therapy can sometimes be

NOTE Confidence: 0.856653341176471

00:39:07.277 --> 00:39:09.720 a good trigger to think about PSG.

NOTE Confidence: 0.856653341176471

00:39:09.720 --> 00:39:12.688 There is a lot of work now looking

NOTE Confidence: 0.856653341176471

00:39:12.688 --> 00:39:15.546 at bamboo tree models of care FCB

NOTE Confidence: 0.856653341176471

00:39:15.546 --> 00:39:18.589 for all sorts of reasons during the.

NOTE Confidence: 0.856653341176471

00:39:18.590 --> 00:39:19.748 The COVID pandemic.

NOTE Confidence: 0.856653341176471

00:39:19.748 --> 00:39:22.450 We've had our sleep lab closed with

NOTE Confidence: 0.856653341176471

00:39:22.522 --> 00:39:25.048 only just started opening things up.

NOTE Confidence: 0.856653341176471

00:39:25.050 --> 00:39:26.790 Probably about two months ago,

NOTE Confidence: 0.856653341176471

00:39:26.790 --> 00:39:29.967 so we've had not a great deal of access

NOTE Confidence: 0.856653341176471

00:39:29.967 --> 00:39:32.810 to to sleep laboratory PSG titration.

NOTE Confidence: 0.856653341176471

00:39:32.810 --> 00:39:35.210 So we've been using a lot

NOTE Confidence: 0.856653341176471

00:39:35.210 --> 00:39:37.024 of ambulatory care models,

NOTE Confidence: 0.856653341176471

00:39:37.024 --> 00:39:40.066 again from the Victorian group are

NOTE Confidence: 0.856653341176471

00:39:40.066 --> 00:39:42.862 showing that using a daycare on

NOTE Confidence: 0.856653341176471

00:39:42.862 --> 00:39:45.400 ambulatory model of IVS set up.

NOTE Confidence: 0.856653341176471

00:39:45.400 --> 00:39:47.920 Not only was able to reduce how

NOTE Confidence: 0.856653341176471

00:39:47.920 --> 00:39:50.059 quickly they can get patients.

NOTE Confidence: 0.856653341176471

00:39:50.060 --> 00:39:52.146 Wanted therapy and this was a group

NOTE Confidence: 0.856653341176471

00:39:52.146 --> 00:39:53.500 of patients with palets,

NOTE Confidence: 0.856653341176471

00:39:53.500 --> 00:39:55.345 so it would significantly reduced

NOTE Confidence: 0.856653341176471

00:39:55.345 --> 00:39:57.617 how quickly patients to be treated

NOTE Confidence: 0.856653341176471

00:39:57.617 --> 00:40:00.116 by just bringing them in during the

NOTE Confidence: 0.856653341176471

00:40:00.116 --> 00:40:02.061 daytime rather than their usual

NOTE Confidence: 0.856653341176471

00:40:02.061 --> 00:40:04.001 practice which was bringing them

NOTE Confidence: 0.856653341176471

00:40:04.001 --> 00:40:06.280 into hospital pad for a couple of

NOTE Confidence: 0.856653341176471

00:40:06.280 --> 00:40:08.453 days and then doing a PSG and.

NOTE Confidence: 0.856653341176471

00:40:08.453 --> 00:40:10.691 The important thing about this study

NOTE Confidence: 0.856653341176471

00:40:10.691 --> 00:40:13.000 was that those patients that were.

NOTE Confidence: 0.8849954

00:40:15.600 --> 00:40:19.106 Set up in this manner with the day

NOTE Confidence: 0.8849954

00:40:19.106 --> 00:40:21.438 set up actually had better survival

NOTE Confidence: 0.8849954

00:40:21.438 --> 00:40:24.421 at 12 months and there's a number

NOTE Confidence: 0.8849954

00:40:24.421 --> 00:40:27.274 of studies showing exactly the same

NOTE Confidence: 0.8849954

00:40:27.274 --> 00:40:30.110 thing that that the daytime setup

NOTE Confidence: 0.8849954

00:40:30.110 --> 00:40:32.435 isn't inferior to the inpatient

NOTE Confidence: 0.8849954

00:40:32.435 --> 00:40:34.698 acclimation in terms of changes in

NOTE Confidence: 0.8849954

00:40:34.698 --> 00:40:36.780 quality of life changes in CO2,

NOTE Confidence: 0.8849954

00:40:36.780 --> 00:40:39.156 and it is can be much more cost effective.

NOTE Confidence: 0.707298586666667

00:40:41.720 --> 00:40:43.028 How we would have, you know,

NOTE Confidence: 0.707298586666667

00:40:43.030 --> 00:40:44.854 approached set up with this ambled

NOTE Confidence: 0.707298586666667

00:40:44.854 --> 00:40:47.118 remodel how we use transfer case carbon

NOTE Confidence: 0.707298586666667

00:40:47.118 --> 00:40:49.407 dioxide monitoring quite a bit so we

NOTE Confidence: 0.707298586666667

00:40:49.474 --> 00:40:51.427 would set the patient up with that

NOTE Confidence: 0.707298586666667

00:40:51.430 --> 00:40:53.901 we would mask fit them with whatever

NOTE Confidence: 0.707298586666667

00:40:53.901 --> 00:40:56.177 mask was most comfortable and then

NOTE Confidence: 0.707298586666667

00:40:56.177 --> 00:40:58.844 if the patient has a diagnosis of

NOTE Confidence: 0.707298586666667

00:40:58.850 --> 00:41:02.588 COPD we would start with M&ST mode.

NOTE Confidence: 0.707298586666667

00:41:02.588 --> 00:41:05.042 Will be back up rate somewhere

NOTE Confidence: 0.707298586666667

00:41:05.042 --> 00:41:07.905 between 14 and 15 by perhaps starting

NOTE Confidence: 0.707298586666667

00:41:07.905 --> 00:41:10.660 12 to 15 centimeters in the pack.

NOTE Confidence: 0.707298586666667

00:41:10.660 --> 00:41:14.062 Alright, and then sitting out Eli minimum

NOTE Confidence: 0.707298586666667

00:41:14.062 --> 00:41:17.030 and maximum on these individuals of the

NOTE Confidence: 0.707298586666667

00:41:17.030 --> 00:41:19.820 web using a certain devices and arise,

NOTE Confidence: 0.707298586666667

00:41:19.820 --> 00:41:22.220 time will be the one to two or 100 to

NOTE Confidence: 0.707298586666667

00:41:22.293 --> 00:41:24.477 200 milliseconds and adding the same

NOTE Confidence: 0.707298586666667

00:41:24.477 --> 00:41:27.033 amount of oxygen is that what they

NOTE Confidence: 0.707298586666667

00:41:27.033 --> 00:41:29.441 would normally have in during the day.

NOTE Confidence: 0.707298586666667

00:41:29.450 --> 00:41:30.515 We would then,

NOTE Confidence: 0.707298586666667

00:41:30.515 --> 00:41:32.645 if it was a neuromuscular patient,

NOTE Confidence: 0.707298586666667

00:41:32.650 --> 00:41:33.254 very similar,

NOTE Confidence: 0.707298586666667

00:41:33.254 --> 00:41:35.368 except that usually will start with a

NOTE Confidence: 0.707298586666667

00:41:35.368 --> 00:41:37.418 lower back up rate just to begin with.

NOTE Confidence: 0.707298586666667

00:41:37.420 --> 00:41:39.086 How to make sure that they they

NOTE Confidence: 0.707298586666667

00:41:39.086 --> 00:41:40.570 feel like they have some control

NOTE Confidence: 0.707298586666667

00:41:40.570 --> 00:41:42.236 and see how good they are at

NOTE Confidence: 0.707298586666667

00:41:42.293 --> 00:41:43.897 actually triggering the device?

NOTE Confidence: 0.707298586666667

00:41:43.900 --> 00:41:45.625 Setting them up more iPads

NOTE Confidence: 0.707298586666667

00:41:45.625 --> 00:41:47.780 for roughly the same E pets.

NOTE Confidence: 0.707298586666667

00:41:47.780 --> 00:41:48.512 And again,

NOTE Confidence: 0.707298586666667

00:41:48.512 --> 00:41:50.948 if the device had minimum and

NOTE Confidence: 0.707298586666667

00:41:50.948 --> 00:41:52.400 maximum inspiratory times,

NOTE Confidence: 0.707298586666667

00:41:52.400 --> 00:41:55.360 setting that and rise time,

NOTE Confidence: 0.707298586666667

00:41:55.360 --> 00:41:58.021 usually at a much slower slope

NOTE Confidence: 0.707298586666667

00:41:58.021 --> 00:42:00.876 at 200 to 300 milliseconds.

NOTE Confidence: 0.707298586666667

00:42:00.880 --> 00:42:04.258 For two to three independent events,

NOTE Confidence: 0.707298586666667

00:42:04.260 --> 00:42:08.050 we would then during that that period

NOTE Confidence: 0.707298586666667

00:42:08.050 --> 00:42:10.535 we passed during the day up titrate

NOTE Confidence: 0.707298586666667

00:42:10.535 --> 00:42:13.057 the IPAP and changed the settings,

NOTE Confidence: 0.707298586666667

00:42:13.060 --> 00:42:15.391 trying to increase the iPad to whatever

NOTE Confidence: 0.707298586666667

00:42:15.391 --> 00:42:17.225 they could maximally tolerated while

NOTE Confidence: 0.707298586666667

00:42:17.225 --> 00:42:19.553 looking at the title volume spiritually,

NOTE Confidence: 0.707298586666667

00:42:19.560 --> 00:42:20.320 rate leak,

NOTE Confidence: 0.707298586666667

00:42:20.320 --> 00:42:22.979 and the impact they're having on CO2.

NOTE Confidence: 0.707298586666667

00:42:22.979 --> 00:42:25.253 How and often makes individuals will

NOTE Confidence: 0.707298586666667

00:42:25.253 --> 00:42:28.438 fall off to sleep so we can actually

NOTE Confidence: 0.707298586666667

00:42:28.438 --> 00:42:30.910 capture what's going on during sleep.

NOTE Confidence: 0.707298586666667

00:42:30.910 --> 00:42:31.612 We would then,

NOTE Confidence: 0.707298586666667

00:42:31.612 --> 00:42:33.250 if they did pull up to sleep,

NOTE Confidence: 0.707298586666667

00:42:33.250 --> 00:42:36.071 we can then adjust the epac part

NOTE Confidence: 0.707298586666667

00:42:36.071 --> 00:42:38.228 as necessary and then we would

NOTE Confidence: 0.707298586666667

00:42:38.228 --> 00:42:40.250 send them home and do remote

NOTE Confidence: 0.707298586666667

00:42:40.324 --> 00:42:42.412 monitoring with ongoing titration

NOTE Confidence: 0.707298586666667

00:42:42.412 --> 00:42:45.348 of settings it's needed and with

NOTE Confidence: 0.707298586666667

00:42:45.348 --> 00:42:47.468 looking at Target title bonds,

NOTE Confidence: 0.707298586666667

00:42:47.470 --> 00:42:49.252 which we may not have achieved

NOTE Confidence: 0.707298586666667

00:42:49.252 --> 00:42:50.750 on that very first day.

NOTE Confidence: 0.707298586666667

00:42:50.750 --> 00:42:53.198 But looking at the target volumes,

NOTE Confidence: 0.707298586666667

00:42:53.200 --> 00:42:56.315 about 6 to 8 mil for the NEUROMUSCULAR'S

NOTE Confidence: 0.707298586666667

00:42:56.315 --> 00:42:59.010 and the eight to 10 patients with

NOTE Confidence: 0.707298586666667

00:42:59.010 --> 00:43:01.548 COPD and looking at using that.

NOTE Confidence: 0.707298586666667

00:43:01.550 --> 00:43:03.926 You might wanna try to adjust the epep.

NOTE Confidence: 0.707298586666667

00:43:03.930 --> 00:43:07.960 Often these individuals have integrated.

NOTE Confidence: 0.707298586666667

00:43:07.960 --> 00:43:09.584 Oximeters that we can.

NOTE Confidence: 0.707298586666667

00:43:09.584 --> 00:43:13.239 Into the machine or a an external one,

NOTE Confidence: 0.707298586666667

00:43:13.240 --> 00:43:15.532 and we will actually monitor what

NOTE Confidence: 0.707298586666667

00:43:15.532 --> 00:43:17.660 their situation is doing as well,

NOTE Confidence: 0.707298586666667

00:43:17.660 --> 00:43:19.886 and and by remote monitoring looking at

NOTE Confidence: 0.707298586666667

00:43:19.886 --> 00:43:22.257 things like that leak or paddle boarding,

NOTE Confidence: 0.707298586666667

00:43:22.260 --> 00:43:24.040 respiratory rate and usage

NOTE Confidence: 0.707298586666667

00:43:24.040 --> 00:43:26.265 and making changes on that.

NOTE Confidence: 0.707298586666667

00:43:26.270 --> 00:43:28.292 If the patient isn't doing well

NOTE Confidence: 0.707298586666667

00:43:28.292 --> 00:43:30.520 we will bring them back to PSG,

NOTE Confidence: 0.707298586666667

00:43:30.520 --> 00:43:33.055 but otherwise I clinical reviews

NOTE Confidence: 0.707298586666667

00:43:33.055 --> 00:43:35.369 looking at in particular the

NOTE Confidence: 0.707298586666667

00:43:35.369 --> 00:43:37.967 information that we can get from

NOTE Confidence: 0.707298586666667

00:43:37.967 --> 00:43:40.530 either the cloud or from the data.

NOTE Confidence: 0.707298586666667

00:43:40.530 --> 00:43:42.760 And certainly there are now

NOTE Confidence: 0.707298586666667

00:43:42.760 --> 00:43:45.102 studies showing that patients set

NOTE Confidence: 0.707298586666667

00:43:45.102 --> 00:43:48.108 up in hospital compared to those

NOTE Confidence: 0.707298586666667

00:43:48.110 --> 00:43:51.130 set up include home initiation,

NOTE Confidence: 0.707298586666667

00:43:51.130 --> 00:43:52.654 which is sort of this study

NOTE Confidence: 0.707298586666667

00:43:52.654 --> 00:43:53.670 out of the Netherlands,

NOTE Confidence: 0.93374719

00:43:53.670 --> 00:43:55.810 which is quite small country.

NOTE Confidence: 0.93374719

00:43:55.810 --> 00:43:58.970 But they by setting patients up in home,

NOTE Confidence: 0.93374719

00:43:58.970 --> 00:44:01.532 found that the long term an invasive

NOTE Confidence: 0.93374719

00:44:01.532 --> 00:44:03.547 ventilation over six months wasn't

NOTE Confidence: 0.93374719

00:44:03.547 --> 00:44:05.667 inferior to in hospital with

NOTE Confidence: 0.93374719

00:44:05.667 --> 00:44:07.712 similar improvements in CO2 and

NOTE Confidence: 0.93374719

00:44:07.712 --> 00:44:10.169 health related quality of life.

NOTE Confidence: 0.93374719

00:44:10.169 --> 00:44:11.918 And very significantly

NOTE Confidence: 0.93374719

00:44:11.918 --> 00:44:13.667 improvements in savings.

NOTE Confidence: 0.93374719

00:44:13.670 --> 00:44:14.940 But the important thing though,

NOTE Confidence: 0.93374719

00:44:14.940 --> 00:44:16.810 is remembering that in this

NOTE Confidence: 0.93374719

00:44:16.810 --> 00:44:18.680 particular study they used remote

NOTE Confidence: 0.93374719

00:44:18.744 --> 00:44:20.862 monitoring and they did use CO2.

NOTE Confidence: 0.93374719

00:44:20.862 --> 00:44:23.634 Transmitting is CO2 in the home,

NOTE Confidence: 0.93374719

00:44:23.640 --> 00:44:26.720 which is not available to all centers

NOTE Confidence: 0.93374719

00:44:26.720 --> 00:44:30.164 that are doing this type of therapy.

NOTE Confidence: 0.93374719

00:44:30.170 --> 00:44:32.425 So what about inpatient and

NOTE Confidence: 0.93374719

00:44:32.425 --> 00:44:34.512 outpatient in Ivy in COPD?

NOTE Confidence: 0.93374719

00:44:34.512 --> 00:44:36.486 And I think you know up front.

NOTE Confidence: 0.93374719

00:44:36.490 --> 00:44:38.821 We have to be very careful which

NOTE Confidence: 0.93374719

00:44:38.821 --> 00:44:41.125 patients with COPD that we put on

NOTE Confidence: 0.93374719

00:44:41.125 --> 00:44:42.433 long invasive installation because

NOTE Confidence: 0.93374719

00:44:42.433 --> 00:44:44.263 not all patients will respond and

NOTE Confidence: 0.93374719

00:44:44.263 --> 00:44:46.437 hence we've got a lot of literature

NOTE Confidence: 0.93374719

00:44:46.437 --> 00:44:48.803 with quite variable or not and and

NOTE Confidence: 0.93374719

00:44:48.803 --> 00:44:51.618 conflicting results regarding women based

NOTE Confidence: 0.93374719

00:44:51.618 --> 00:44:54.571 ventilation and stable public XCOPD.

NOTE Confidence: 0.93374719

00:44:54.571 --> 00:44:55.052 However,

NOTE Confidence: 0.93374719

00:44:55.052 --> 00:44:57.938 you know one of the recent

NOTE Confidence: 0.93374719

00:44:57.938 --> 00:45:00.568 guidelines from the ATS looking at.

NOTE Confidence: 0.93374719

00:45:00.570 --> 00:45:01.738 We use it in,

NOTE Confidence: 0.93374719

00:45:01.738 --> 00:45:03.490 I think in this particular population,

NOTE Confidence: 0.93374719

00:45:03.490 --> 00:45:05.130 some of the questions that

NOTE Confidence: 0.93374719

00:45:05.130 --> 00:45:07.420 we we looked at was firstly,

NOTE Confidence: 0.93374719

00:45:07.420 --> 00:45:11.316 should it be used versus usual tier and

NOTE Confidence: 0.93374719

00:45:11.320 --> 00:45:13.440 the suggestion the recommendation was

NOTE Confidence: 0.93374719

00:45:13.440 --> 00:45:16.549 to to use it with moderate certainty

NOTE Confidence: 0.93374719

00:45:16.549 --> 00:45:20.189 based on the evidence that is out there.

NOTE Confidence: 0.93374719

00:45:20.190 --> 00:45:24.950 Then another question that we tackled was,

NOTE Confidence: 0.93374719

00:45:24.950 --> 00:45:28.856 should it be used and initiated in

NOTE Confidence: 0.93374719

00:45:28.856 --> 00:45:31.022 patients hospitalized just immediately

NOTE Confidence: 0.93374719

00:45:31.022 --> 00:45:33.627 after acute exasperation with acute

NOTE Confidence: 0.93374719

00:45:33.627 --> 00:45:35.810 and chronic respiratory failure,

NOTE Confidence: 0.93374719

00:45:35.810 --> 00:45:39.895 and our recommendation was conditionally

NOTE Confidence: 0.93374719

00:45:39.895 --> 00:45:43.345 not to be and instead waiting a

NOTE Confidence: 0.93374719

00:45:43.345 --> 00:45:46.525 couple a couple of weeks to make sure

NOTE Confidence: 0.93374719

00:45:46.525 --> 00:45:49.093 that the patient was still hypercapnic.

NOTE Confidence: 0.93374719

00:45:49.100 --> 00:45:49.920 But again,

NOTE Confidence: 0.93374719

00:45:49.920 --> 00:45:51.150 that recommendation came.

NOTE Confidence: 0.93374719

00:45:51.150 --> 00:45:52.536 It's no certainty.

NOTE Confidence: 0.93374719

00:45:52.536 --> 00:45:53.460 Before softly,

NOTE Confidence: 0.93374719

00:45:53.460 --> 00:45:56.204 the limited evidence that was out there,

NOTE Confidence: 0.93374719

00:45:56.210 --> 00:45:59.024 and finally should be beat should

NOTE Confidence: 0.93374719

00:45:59.024 --> 00:46:01.444 long term non invasive ventilation

NOTE Confidence: 0.93374719

00:46:01.444 --> 00:46:03.937 be determined using overnight PSG

NOTE Confidence: 0.93374719

00:46:03.937 --> 00:46:06.357 in this particular population and

NOTE Confidence: 0.93374719

00:46:06.357 --> 00:46:08.293 again the recommended conditional

NOTE Confidence: 0.93374719

00:46:08.366 --> 00:46:10.550 recommendation was not to use it

NOTE Confidence: 0.93374719

00:46:10.550 --> 00:46:13.916 not to use PSG overnight titration,

NOTE Confidence: 0.93374719

00:46:13.920 --> 00:46:16.385 though that was associated with

NOTE Confidence: 0.93374719

00:46:16.385 --> 00:46:19.376 low very low certainty around the

NOTE Confidence: 0.93374719

00:46:19.376 --> 00:46:21.596 data quickly available to us.

NOTE Confidence: 0.93374719

00:46:21.600 --> 00:46:22.744 The power that recommendation

NOTE Confidence: 0.93374719

00:46:22.744 --> 00:46:24.779 came from the fact that we use

NOTE Confidence: 0.93374719

00:46:24.779 --> 00:46:26.099 is high in this population.

NOTE Confidence: 0.93374719

00:46:26.100 --> 00:46:27.942 High intensity or high pressure in

NOTE Confidence: 0.93374719

00:46:27.942 --> 00:46:30.888 Ivy seems to be the way in which we

NOTE Confidence: 0.93374719

00:46:30.888 --> 00:46:32.543 should be treating these patients.

NOTE Confidence: 0.93374719

00:46:32.550 --> 00:46:35.735 So this is a specific approach to

NOTE Confidence: 0.93374719

00:46:35.735 --> 00:46:37.540 ventilating these individuals where

NOTE Confidence: 0.93374719

00:46:37.540 --> 00:46:40.552 you going to use higher settings

NOTE Confidence: 0.93374719

00:46:40.552 --> 00:46:43.750 and you might normally think about.

NOTE Confidence: 0.93374719

00:46:43.750 --> 00:46:46.612 But the idea is not to get the maximum,

NOTE Confidence: 0.93374719

00:46:46.620 --> 00:46:48.052 but rather you try.

NOTE Confidence: 0.93374719

00:46:48.052 --> 00:46:49.842 You're looking very carefully at

NOTE Confidence: 0.93374719

00:46:49.842 --> 00:46:52.068 the CO2 and trying to achieve normal

NOTE Confidence: 0.93374719

00:46:52.068 --> 00:46:54.532 cap near or at the lowest CO2

NOTE Confidence: 0.93374719

00:46:54.532 --> 00:46:57.844 abuse and possible so around about.

NOTE Confidence: 0.93374719

00:46:57.850 --> 00:47:01.553 You know 20% or CO2 list then have

NOTE Confidence: 0.93374719

00:47:01.553 --> 00:47:03.971 48 millimeters of mercury and that's

NOTE Confidence: 0.93374719

00:47:03.971 --> 00:47:07.169 achieved in a stepwise titration by Pat.

NOTE Confidence: 0.93374719

00:47:07.170 --> 00:47:09.774 And again this measure analysis by

NOTE Confidence: 0.93374719

00:47:09.774 --> 00:47:12.160 all and colleagues recently published

NOTE Confidence: 0.93374719

00:47:12.160 --> 00:47:14.456 showing that those individuals.

NOTE Confidence: 0.93374719

00:47:14.460 --> 00:47:18.204 Which CRPG where a targeted approach

NOTE Confidence: 0.93374719

00:47:18.204 --> 00:47:20.902 to NI V trans, normally CO2.

NOTE Confidence: 0.93374719

00:47:20.902 --> 00:47:24.388 You've got much better daytime CO2

NOTE Confidence: 0.93374719

00:47:24.388 --> 00:47:26.867 reductions compared to not targeting

NOTE Confidence: 0.93374719

00:47:26.867 --> 00:47:29.737 the CO2 which fits in also with

NOTE Confidence: 0.805317614444445

00:47:29.824 --> 00:47:32.556 the recommendations from European

NOTE Confidence: 0.805317614444445

00:47:32.556 --> 00:47:35.696 spiritually as society and this high

NOTE Confidence: 0.805317614444445

00:47:35.696 --> 00:47:37.506 intensity approach can't be achieved

NOTE Confidence: 0.805317614444445

00:47:37.506 --> 00:47:39.158 in single night, particularly,

NOTE Confidence: 0.805317614444445

00:47:39.158 --> 00:47:41.648 people are doing a diagnostic

NOTE Confidence: 0.805317614444445

00:47:41.650 --> 00:47:43.890 diagnostic half titration study.

NOTE Confidence: 0.805317614444445

00:47:43.890 --> 00:47:47.817 In Europe they used to admit patients

NOTE Confidence: 0.805317614444445

00:47:47.817 --> 00:47:51.204 for four to seven days in our country

NOTE Confidence: 0.805317614444445

00:47:51.204 --> 00:47:52.894 as someone who's otherwise well,

NOTE Confidence: 0.805317614444445

00:47:52.900 --> 00:47:54.622 our patients don't wanna come into

NOTE Confidence: 0.805317614444445

00:47:54.622 --> 00:47:56.209 hospital for that period of time,

NOTE Confidence: 0.805317614444445

00:47:56.210 --> 00:47:59.950 nor do we often have bed capacity to do that.

NOTE Confidence: 0.805317614444445

00:47:59.950 --> 00:48:02.476 So this is where remote monitoring

NOTE Confidence: 0.805317614444445

00:48:02.476 --> 00:48:04.160 titration becomes incredibly important.

NOTE Confidence: 0.805317614444445

00:48:04.160 --> 00:48:06.484 And again, the group out of the

NOTE Confidence: 0.805317614444445

00:48:06.484 --> 00:48:08.209 Netherlands have looked at even

NOTE Confidence: 0.805317614444445

00:48:08.209 --> 00:48:10.420 setting the patients with COPD at

NOTE Confidence: 0.805317614444445

00:48:10.420 --> 00:48:13.060 home compared to being in hospital.

NOTE Confidence: 0.805317614444445

00:48:13.060 --> 00:48:14.716 And while it may have taken

NOTE Confidence: 0.805317614444445

00:48:14.716 --> 00:48:15.820 longer for the patients.

NOTE Confidence: 0.805317614444445

00:48:15.820 --> 00:48:18.186 To get to those higher pressures when

NOTE Confidence: 0.805317614444445

00:48:18.186 --> 00:48:20.920 they were being treated and set up

NOTE Confidence: 0.805317614444445

00:48:20.920 --> 00:48:23.898 at home and over the next six months,

NOTE Confidence: 0.805317614444445

00:48:23.900 --> 00:48:26.588 there was no difference in the the CO2

NOTE Confidence: 0.805317614444445

00:48:26.588 --> 00:48:29.194 between those that were set up in hospital

NOTE Confidence: 0.805317614444445

00:48:29.194 --> 00:48:31.480 and those that were set up at home.

NOTE Confidence: 0.805317614444445

00:48:31.480 --> 00:48:33.315 And similarly the health related

NOTE Confidence: 0.805317614444445

00:48:33.315 --> 00:48:35.863 quality of life improved to a similar

NOTE Confidence: 0.805317614444445

00:48:35.863 --> 00:48:38.290 degree with those patients that were

NOTE Confidence: 0.805317614444445

00:48:38.290 --> 00:48:42.013 set up within might be at home having

NOTE Confidence: 0.805317614444445

00:48:42.013 --> 00:48:44.583 significantly reduced costs of care.

NOTE Confidence: 0.805317614444445

00:48:44.590 --> 00:48:46.960 Remote monitoring is becoming very,

NOTE Confidence: 0.805317614444445

00:48:46.960 --> 00:48:49.700 very important how your devices

NOTE Confidence: 0.805317614444445

00:48:49.700 --> 00:48:51.892 have really excellent information

NOTE Confidence: 0.805317614444445

00:48:51.892 --> 00:48:54.425 around calligraphy and we can

NOTE Confidence: 0.805317614444445

00:48:54.425 --> 00:48:56.329 get information about flow,

NOTE Confidence: 0.805317614444445

00:48:56.330 --> 00:48:57.114 tidal boarding,

NOTE Confidence: 0.805317614444445

00:48:57.114 --> 00:48:59.466 the spiritual rate in some devices.

NOTE Confidence: 0.805317614444445

00:48:59.470 --> 00:49:01.745 It's even breath by breath so and

NOTE Confidence: 0.805317614444445

00:49:01.745 --> 00:49:03.668 we use that quite a lot.

NOTE Confidence: 0.805317614444445

00:49:03.670 --> 00:49:05.614 This information we can upload it

NOTE Confidence: 0.805317614444445

00:49:05.614 --> 00:49:08.554 to the cloud had it providing that

NOTE Confidence: 0.805317614444445

00:49:08.554 --> 00:49:10.798 ability to identify patients early,

NOTE Confidence: 0.805317614444445

00:49:10.798 --> 00:49:13.022 but I think one of the things before

NOTE Confidence: 0.805317614444445

00:49:13.022 --> 00:49:14.997 we get too far down the track.

NOTE Confidence: 0.805317614444445

00:49:15.000 --> 00:49:17.905 We need a lot more information about

NOTE Confidence: 0.805317614444445

00:49:17.905 --> 00:49:20.669 how accurate and how liable all of

NOTE Confidence: 0.805317614444445

00:49:20.669 --> 00:49:23.556 these parameters that are coming to us,

NOTE Confidence: 0.805317614444445

00:49:23.560 --> 00:49:26.003 and really how we should be using

NOTE Confidence: 0.805317614444445

00:49:26.003 --> 00:49:28.341 this data in interpreting how

NOTE Confidence: 0.805317614444445

00:49:28.341 --> 00:49:30.147 which we're going to be changing.

NOTE Confidence: 0.805317614444445

00:49:30.150 --> 00:49:30.992 You know,

NOTE Confidence: 0.805317614444445

00:49:30.992 --> 00:49:33.097 settings and clinical management of

NOTE Confidence: 0.805317614444445

00:49:33.097 --> 00:49:34.820 these individuals because depending

NOTE Confidence: 0.805317614444445

00:49:34.820 --> 00:49:37.208 on the manufacturer of these devices,

NOTE Confidence: 0.805317614444445

00:49:37.210 --> 00:49:40.270 they can often define leaks or

NOTE Confidence: 0.805317614444445

00:49:40.270 --> 00:49:42.808 define how admin had partners

NOTE Confidence: 0.805317614444445

00:49:42.808 --> 00:49:45.338 are are expressed with these.

NOTE Confidence: 0.805317614444445

00:49:45.340 --> 00:49:47.308 Machine so we need to know a lot

NOTE Confidence: 0.805317614444445

00:49:47.308 --> 00:49:48.977 more about their algorithms and

NOTE Confidence: 0.805317614444445

00:49:48.977 --> 00:49:50.837 how reliable they actually are.

NOTE Confidence: 0.805317614444445

00:49:50.840 --> 00:49:53.184 So I just want to finish up and

NOTE Confidence: 0.805317614444445

00:49:53.184 --> 00:49:55.392 showing him this is a lady that we

NOTE Confidence: 0.805317614444445

00:49:55.392 --> 00:49:58.115 had a number of years ago with severe

NOTE Confidence: 0.805317614444445

00:49:58.115 --> 00:50:01.440 COPD constantly coming into hospital

NOTE Confidence: 0.805317614444445

00:50:01.440 --> 00:50:04.290 with with an exacerbation moderate

NOTE Confidence: 0.805317614444445

00:50:04.290 --> 00:50:07.570 cognitive impairment when we saw her,

NOTE Confidence: 0.805317614444445

00:50:07.570 --> 00:50:10.082 we had put her on acute non invasive

NOTE Confidence: 0.805317614444445

00:50:10.082 --> 00:50:11.950 ventilation was award happy Kapnick

NOTE Confidence: 0.805317614444445

00:50:11.950 --> 00:50:14.125 discharged her husband who was

NOTE Confidence: 0.805317614444445

00:50:14.125 --> 00:50:15.730 at that stage 90.

NOTE Confidence: 0.805317614444445

00:50:15.730 --> 00:50:17.872 Said I would like to try this at home.

NOTE Confidence: 0.805317614444445

00:50:17.880 --> 00:50:19.868 We weren't sure they were going to

NOTE Confidence: 0.805317614444445

00:50:19.868 --> 00:50:21.787 manage but we gave them a trial

NOTE Confidence: 0.805317614444445

00:50:21.790 --> 00:50:23.848 three months and three weeks later we

NOTE Confidence: 0.805317614444445

00:50:23.848 --> 00:50:25.820 brought her back to our outpatients.

NOTE Confidence: 0.805317614444445

00:50:25.820 --> 00:50:27.710 She was actually using it really well,

NOTE Confidence: 0.805317614444445

00:50:27.710 --> 00:50:31.232 but a CO2 was still high at at 54

NOTE Confidence: 0.805317614444445

00:50:31.232 --> 00:50:33.764 when we downloaded from the card.

NOTE Confidence: 0.805317614444445

00:50:33.770 --> 00:50:35.774 The information you can see she

NOTE Confidence: 0.805317614444445

00:50:35.774 --> 00:50:37.110 had really quite high.

NOTE Confidence: 0.805317614444445

00:50:37.110 --> 00:50:37.609 Hi,

NOTE Confidence: 0.805317614444445

00:50:37.609 --> 00:50:40.104 the title bombings here were

NOTE Confidence: 0.805317614444445

00:50:40.104 --> 00:50:42.100 under 400 mills hand,

NOTE Confidence: 0.805317614444445

00:50:42.100 --> 00:50:44.578 but leak was not a problem

NOTE Confidence: 0.882010495

00:50:44.580 --> 00:50:46.300 and when we looked at the breath by.

NOTE Confidence: 0.882010495

00:50:46.300 --> 00:50:48.524 Risk we could see that she was actually

NOTE Confidence: 0.882010495

00:50:48.524 --> 00:50:50.580 still having quite a lot of obstruction.

NOTE Confidence: 0.882010495

00:50:50.580 --> 00:50:53.060 She was on a full face mask and she wasn't

NOTE Confidence: 0.882010495

00:50:53.123 --> 00:50:56.421 going to use anything else, so we come.

NOTE Confidence: 0.882010495

00:50:56.421 --> 00:50:59.823 Decided that we needed fire pressures.

NOTE Confidence: 0.882010495

00:50:59.830 --> 00:51:03.070 We talked them into being able to remote

NOTE Confidence: 0.882010495

00:51:03.070 --> 00:51:04.988 remote monitor them and change the

NOTE Confidence: 0.882010495

00:51:04.988 --> 00:51:07.414 settings and you can see over the next

NOTE Confidence: 0.882010495

00:51:07.414 --> 00:51:09.520 little while we gradually increased the

NOTE Confidence: 0.882010495

00:51:09.520 --> 00:51:11.996 pressures and we got to the point where we

NOTE Confidence: 0.882010495

00:51:11.996 --> 00:51:14.442 had enough increasingly PAP and support.

NOTE Confidence: 0.882010495

00:51:14.442 --> 00:51:18.069 You can see this dramatic drop in the

NOTE Confidence: 0.882010495

00:51:18.069 --> 00:51:21.212 AHI the improvement in title volumes and

NOTE Confidence: 0.882010495

00:51:21.212 --> 00:51:24.981 now the patient with the backup rate was

NOTE Confidence: 0.882010495

00:51:24.981 --> 00:51:27.346 being much much more passively ventilated.

NOTE Confidence: 0.882010495

00:51:27.346 --> 00:51:30.145 Which is what we were trying to achieve

NOTE Confidence: 0.882010495

00:51:30.145 --> 00:51:32.850 when we looked at the breath by breath data.

NOTE Confidence: 0.882010495

00:51:32.850 --> 00:51:35.352 Much better we had actually control

NOTE Confidence: 0.882010495

00:51:35.352 --> 00:51:37.670 that upper airway obstruction remotely.

NOTE Confidence: 0.882010495

00:51:37.670 --> 00:51:39.710 We brought it back for a blood gas

NOTE Confidence: 0.882010495

00:51:39.710 --> 00:51:42.047 and you can see that she now had a

NOTE Confidence: 0.882010495

00:51:42.047 --> 00:51:44.136 normal CO2 and three years down the

NOTE Confidence: 0.882010495

00:51:44.136 --> 00:51:45.360 track she's still going,

NOTE Confidence: 0.882010495

00:51:45.360 --> 00:51:47.285 so we're certainly seeing increased

NOTE Confidence: 0.882010495

00:51:47.285 --> 00:51:49.210 use of client information for

NOTE Confidence: 0.882010495

00:51:49.278 --> 00:51:50.940 chronic respiratory failure.

NOTE Confidence: 0.882010495

00:51:50.940 --> 00:51:53.140 Lots more devices with broadening

NOTE Confidence: 0.882010495

00:51:53.140 --> 00:51:55.692 our range of modes available to

NOTE Confidence: 0.882010495

00:51:55.692 --> 00:51:57.617 us to help us try and match.

NOTE Confidence: 0.882010495

00:51:57.620 --> 00:51:59.654 That the spiritual needs of the

NOTE Confidence: 0.882010495

00:51:59.654 --> 00:52:01.490 patient to the ventilator output.

NOTE Confidence: 0.882010495

00:52:01.490 --> 00:52:03.690 Thinking about all those

NOTE Confidence: 0.882010495

00:52:03.690 --> 00:52:05.340 alternatives appear sketchy,

NOTE Confidence: 0.882010495

00:52:05.340 --> 00:52:07.524 which we've been using quite a

NOTE Confidence: 0.882010495

00:52:07.524 --> 00:52:09.430 lot through these pandemic times,

NOTE Confidence: 0.882010495

00:52:09.430 --> 00:52:11.698 and in many cases the evidence

NOTE Confidence: 0.882010495

00:52:11.698 --> 00:52:13.970 shows they're not inferior to PSG

NOTE Confidence: 0.882010495

00:52:13.970 --> 00:52:16.040 and can be more cost effective

NOTE Confidence: 0.882010495

00:52:16.040 --> 00:52:17.860 and convenient for the patient.

NOTE Confidence: 0.882010495

00:52:17.860 --> 00:52:20.844 But we have to still have a PSG

NOTE Confidence: 0.882010495

00:52:20.844 --> 00:52:23.312 for patients not responding auto

NOTE Confidence: 0.882010495

00:52:23.312 --> 00:52:25.964 titrating modes again and not inferior,

NOTE Confidence: 0.882010495

00:52:25.970 --> 00:52:27.518 but really important.

NOTE Confidence: 0.882010495

00:52:27.518 --> 00:52:29.058 Mass edema, tations,

NOTE Confidence: 0.882010495

00:52:29.058 --> 00:52:31.598 and I think the importance.

NOTE Confidence: 0.882010495

00:52:31.600 --> 00:52:32.015 However,

NOTE Confidence: 0.882010495

00:52:32.015 --> 00:52:34.090 we approach these patients that

NOTE Confidence: 0.882010495

00:52:34.090 --> 00:52:36.207 ongoing monitoring and that remote

NOTE Confidence: 0.882010495

00:52:36.207 --> 00:52:38.187 monitoring is really giving us

NOTE Confidence: 0.882010495

00:52:38.187 --> 00:52:40.205 opening up part convenience for

NOTE Confidence: 0.882010495

00:52:40.205 --> 00:52:41.669 both past center patients.

NOTE Confidence: 0.882010495

00:52:41.670 --> 00:52:44.158 So I will stop there for any questions.

NOTE Confidence: 0.926613128

00:52:48.960 --> 00:52:50.160 Thank you so much Doctor.

NOTE Confidence: 0.926613128

00:52:50.160 --> 00:52:51.504 Pepper that was outstanding.

NOTE Confidence: 0.926613128

00:52:51.504 --> 00:52:53.312 Really. A wonderful wonderful talk.

NOTE Confidence: 0.926613128

00:52:53.312 --> 00:52:56.159 I think I I just learned so much.

NOTE Confidence: 0.926613128

00:52:56.160 --> 00:52:57.216 Every time you speak.

NOTE Confidence: 0.926613128

00:52:57.216 --> 00:53:00.570 So thank you. I I I'm struck by

NOTE Confidence: 0.926613128

00:53:00.570 --> 00:53:02.178 several things that you said I,

NOTE Confidence: 0.926613128

00:53:02.180 --> 00:53:03.668 I think people can get overwhelmed

NOTE Confidence: 0.926613128

00:53:03.668 --> 00:53:05.100 sometimes with all the settings.

NOTE Confidence: 0.926613128

00:53:05.100 --> 00:53:07.017 And I love how you started out with saying,

NOTE Confidence: 0.926613128

00:53:07.020 --> 00:53:08.434 you know these are the goals that

NOTE Confidence: 0.926613128

00:53:08.434 --> 00:53:10.022 we're trying to achieve and I think

NOTE Confidence: 0.926613128

00:53:10.022 --> 00:53:11.432 that's important thing that we always

NOTE Confidence: 0.926613128

00:53:11.474 --> 00:53:12.994 try to bring home to our fellows too.

NOTE Confidence: 0.926613128

00:53:13.000 --> 00:53:14.575 It's like we want to improve oxygenation.

NOTE Confidence: 0.926613128

00:53:14.580 --> 00:53:16.344 We kind of want to improve ventilation.

NOTE Confidence: 0.926613128

00:53:16.350 --> 00:53:18.030 We want to improve hospitalizations,

NOTE Confidence: 0.926613128

00:53:18.030 --> 00:53:18.347 outcomes,

NOTE Confidence: 0.926613128

00:53:18.347 --> 00:53:20.566 outcomes that are important to the patient,

NOTE Confidence: 0.926613128

00:53:20.570 --> 00:53:22.555 and we're using these techniques

NOTE Confidence: 0.926613128

00:53:22.555 --> 00:53:24.540 in order to do that.

NOTE Confidence: 0.926613128

00:53:24.540 --> 00:53:26.528 So, so thank you for a really,

NOTE Confidence: 0.926613128

00:53:26.530 --> 00:53:28.918 really terrific talk.

NOTE Confidence: 0.926613128

00:53:28.920 --> 00:53:29.934 Just a question.

NOTE Confidence: 0.926613128

00:53:29.934 --> 00:53:30.610 You know.

NOTE Confidence: 0.926613128

00:53:30.610 --> 00:53:32.410 I had the same observation that with COVID,

NOTE Confidence: 0.926613128

00:53:32.410 --> 00:53:33.910 we've really gone outside the box.

NOTE Confidence: 0.926613128

00:53:33.910 --> 00:53:35.526 We used to do a lot more PSGS.

NOTE Confidence: 0.926613128

00:53:35.530 --> 00:53:37.784 We're doing less now in the US.

NOTE Confidence: 0.926613128

00:53:37.790 --> 00:53:39.614 We don't really get to bring them in,

NOTE Confidence: 0.926613128

00:53:39.620 --> 00:53:40.420 even for a day,

NOTE Confidence: 0.926613128

00:53:40.420 --> 00:53:41.995 so we use we relying on the

NOTE Confidence: 0.926613128

00:53:41.995 --> 00:53:43.287 durable medical equipment companies

NOTE Confidence: 0.926613128

00:53:43.287 --> 00:53:45.110 to get our patients set up.

NOTE Confidence: 0.926613128

00:53:45.110 --> 00:53:46.064 And then we're doing a lot

NOTE Confidence: 0.926613128

00:53:46.064 --> 00:53:46.970 of the back and forth.

NOTE Confidence: 0.926613128

00:53:46.970 --> 00:53:47.918 Monitoring as well,

NOTE Confidence: 0.926613128

00:53:47.918 --> 00:53:50.571 but I think your point of the title

NOTE Confidence: 0.926613128

00:53:50.571 --> 00:53:52.411 volume is is really important

NOTE Confidence: 0.926613128

00:53:52.411 --> 00:53:54.730 when we're looking at the numbers.

NOTE Confidence: 0.926613128

00:53:54.730 --> 00:53:55.972 I think sometimes people get focused

NOTE Confidence: 0.926613128

00:53:55.972 --> 00:53:57.630 on the number is the title volume OK?

NOTE Confidence: 0.926613128

00:53:57.630 --> 00:53:59.331 And at the end of the day that may

NOTE Confidence: 0.926613128

00:53:59.331 --> 00:54:00.872 not even be accurate if there's

NOTE Confidence: 0.926613128

00:54:00.872 --> 00:54:02.783 high leak and and that's a really

NOTE Confidence: 0.926613128

00:54:02.783 --> 00:54:04.463 important point that you brought up.

NOTE Confidence: 0.926613128

00:54:04.470 --> 00:54:06.828 I do want to open it up to questions

NOTE Confidence: 0.926613128

00:54:06.828 --> 00:54:09.384 I'm I'm just want to take a look here.

NOTE Confidence: 0.926613128

00:54:09.390 --> 00:54:11.298 There's one question so far from

NOTE Confidence: 0.926613128

00:54:11.298 --> 00:54:12.810 the audience and one is.

NOTE Confidence: 0.926613128

00:54:12.810 --> 00:54:15.876 Thank you for a wonderful talk.

NOTE Confidence: 0.926613128

00:54:15.880 --> 00:54:17.760 It's an example of a seal PD patient

NOTE Confidence: 0.926613128

00:54:17.760 --> 00:54:19.180 using their respironics breath by

NOTE Confidence: 0.926613128

00:54:19.180 --> 00:54:20.974 breath data to your knowledge is

NOTE Confidence: 0.926613128

00:54:20.974 --> 00:54:22.452 breath by breath data available

NOTE Confidence: 0.926613128

00:54:22.452 --> 00:54:23.580 from Res Med devices,

NOTE Confidence: 0.926613128

00:54:23.580 --> 00:54:25.326 especially on the cloud or airview.

NOTE Confidence: 0.886379916666667

00:54:27.000 --> 00:54:29.268 So unfortunately the answer is no.

NOTE Confidence: 0.886379916666667

00:54:29.270 --> 00:54:31.174 So the advantage of the Phillips is you

NOTE Confidence: 0.886379916666667

00:54:31.174 --> 00:54:33.216 can get some limited breath by breath,

NOTE Confidence: 0.886379916666667

00:54:33.220 --> 00:54:35.983 but with the simple devices and.

NOTE Confidence: 0.886379916666667

00:54:35.983 --> 00:54:38.967 You can't do that with the res Med,

NOTE Confidence: 0.886379916666667

00:54:38.970 --> 00:54:40.242 but we just get the patience

NOTE Confidence: 0.886379916666667

00:54:40.242 --> 00:54:41.390 or post in the card.

NOTE Confidence: 0.886379916666667

00:54:41.390 --> 00:54:43.595 And in fact the the information on the cards,

NOTE Confidence: 0.886379916666667

00:54:43.600 --> 00:54:46.346 the last five or six days is

NOTE Confidence: 0.886379916666667

00:54:46.346 --> 00:54:48.276 actually superior to what you

NOTE Confidence: 0.886379916666667

00:54:48.276 --> 00:54:50.814 get on the on care orchestrator,

NOTE Confidence: 0.886379916666667

00:54:50.814 --> 00:54:54.020 because you can actually blow it up.

NOTE Confidence: 0.886379916666667

00:54:54.020 --> 00:54:56.092 You know you can look at it

NOTE Confidence: 0.886379916666667

00:54:56.092 --> 00:54:58.300 one one minute 32nd, 5 minute,

NOTE Confidence: 0.886379916666667

00:54:58.300 --> 00:55:00.940 so there's a lot more flexibility

NOTE Confidence: 0.886379916666667

00:55:00.940 --> 00:55:03.128 and and a lot more data.

NOTE Confidence: 0.886379916666667

00:55:03.130 --> 00:55:04.965 Much more richer data with

NOTE Confidence: 0.886379916666667

00:55:04.965 --> 00:55:06.372 the reasoning device, but.

NOTE Confidence: 0.886379916666667

00:55:06.372 --> 00:55:08.184 It is on the card only,

NOTE Confidence: 0.886379916666667

00:55:08.190 --> 00:55:10.170 whereas with the Phillips device,

NOTE Confidence: 0.886379916666667

00:55:10.170 --> 00:55:12.573 once you get on the card and what you

NOTE Confidence: 0.886379916666667

00:55:12.573 --> 00:55:15.114 get on the cloud is about the same so.

NOTE Confidence: 0.886379916666667

00:55:15.120 --> 00:55:16.360 It's a lot more limited,

NOTE Confidence: 0.886379916666667

00:55:16.360 --> 00:55:18.677 but it's there a lot more frequently,

NOTE Confidence: 0.886379916666667

00:55:18.680 --> 00:55:22.106 so convenience versus depth of information.

NOTE Confidence: 0.881773154

00:55:23.840 --> 00:55:25.620 City, thank you. Thank you.

NOTE Confidence: 0.881773154

00:55:25.620 --> 00:55:27.320 Other questions. People can feel

NOTE Confidence: 0.881773154

00:55:27.320 --> 00:55:29.619 free to either type into the chat.

NOTE Confidence: 0.881773154

00:55:29.620 --> 00:55:31.260 I'll be happy to read or if you want to

NOTE Confidence: 0.881773154

00:55:31.302 --> 00:55:32.988 unmute yourself you should have that

NOTE Confidence: 0.881773154

00:55:32.988 --> 00:55:34.386 capability to unmute yourself. Now.

NOTE Confidence: 0.881773154

00:55:34.386 --> 00:55:36.950 If you have a question that you want to ask.

NOTE Confidence: 0.80218683375

00:55:40.700 --> 00:55:43.031 Maybe what people are doing that I think that

NOTE Confidence: 0.80218683375

00:55:43.031 --> 00:55:45.410 you know when we're sitting these settings,

NOTE Confidence: 0.80218683375

00:55:45.410 --> 00:55:47.414 different people can approach the setting

NOTE Confidence: 0.80218683375

00:55:47.414 --> 00:55:49.436 of these patients in slightly different

NOTE Confidence: 0.80218683375

00:55:49.436 --> 00:55:51.940 ways and still get the same end result.

NOTE Confidence: 0.80218683375

00:55:51.940 --> 00:55:53.347 But you know what are the goals,

NOTE Confidence: 0.80218683375

00:55:53.350 --> 00:55:55.065 not just what we're trying to achieve?

NOTE Confidence: 0.80218683375

00:55:55.070 --> 00:55:57.261 We're always trying to achieve that drop

NOTE Confidence: 0.80218683375

00:55:57.261 --> 00:55:59.277 in carbon dioxide patients may have

NOTE Confidence: 0.80218683375

00:55:59.277 --> 00:56:01.323 slightly different goals to our clinic.

NOTE Confidence: 0.80218683375

00:56:01.330 --> 00:56:02.725 What we clinically,

NOTE Confidence: 0.80218683375

00:56:02.725 --> 00:56:04.585 objectively want to have,

NOTE Confidence: 0.80218683375

00:56:04.590 --> 00:56:07.369 and I think there's a good paper

NOTE Confidence: 0.80218683375

00:56:07.369 --> 00:56:09.838 by Patel in thorax looking at.

NOTE Confidence: 0.80218683375

00:56:09.838 --> 00:56:12.340 Difference in settings between a large

NOTE Confidence: 0.80218683375

00:56:12.409 --> 00:56:15.048 French group and a large English group

NOTE Confidence: 0.80218683375

00:56:15.050 --> 00:56:17.500 and basically the patient survival.

NOTE Confidence: 0.80218683375

00:56:17.500 --> 00:56:19.532 There wasn't any difference in a whole lot

NOTE Confidence: 0.80218683375

00:56:19.532 --> 00:56:21.360 of parameters even though they approached.

NOTE Confidence: 0.80218683375

00:56:21.360 --> 00:56:23.908 I think the French group had slightly

NOTE Confidence: 0.80218683375

00:56:23.908 --> 00:56:26.139 lower pressures than the English group

NOTE Confidence: 0.80218683375

00:56:26.140 --> 00:56:29.290 and slightly higher respiratory rates,

NOTE Confidence: 0.80218683375

00:56:29.290 --> 00:56:32.186 but the the final outcomes exactly the same.

NOTE Confidence: 0.80218683375

00:56:32.190 --> 00:56:34.000 So two different clinicians may

NOTE Confidence: 0.80218683375

00:56:34.000 --> 00:56:35.448 do things slightly differently,

NOTE Confidence: 0.80218683375

00:56:35.450 --> 00:56:37.358 but with that monitoring it comes

NOTE Confidence: 0.80218683375

00:56:37.358 --> 00:56:39.879 down our two with how we're doing it.

NOTE Confidence: 0.80218683375

00:56:39.880 --> 00:56:41.428 Is it effective for the patient?

NOTE Confidence: 0.869435280714286

00:56:43.560 --> 00:56:46.392 What percent of your patients do you think

NOTE Confidence: 0.869435280714286

00:56:46.392 --> 00:56:48.667 you're currently doing Poly sonography on?

NOTE Confidence: 0.869435280714286

00:56:48.670 --> 00:56:50.056 You know who these difficult patients?

NOTE Confidence: 0.869435280714286

00:56:50.060 --> 00:56:51.614 And would you? And do you think

NOTE Confidence: 0.869435280714286

00:56:51.614 --> 00:56:52.878 there's a difference between the

NOTE Confidence: 0.869435280714286

00:56:52.878 --> 00:56:54.570 neuromuscular group and the COPD group?

NOTE Confidence: 0.764393083703704

00:56:55.210 --> 00:56:57.737 OK, so we've probably had we still

NOTE Confidence: 0.764393083703704

00:56:57.737 --> 00:57:00.458 get because of our and then again

NOTE Confidence: 0.764393083703704

00:57:00.458 --> 00:57:02.798 because of the tyranny of distance

NOTE Confidence: 0.764393083703704

00:57:02.880 --> 00:57:05.239 some of the patients are who we,

NOTE Confidence: 0.764393083703704

00:57:05.240 --> 00:57:07.440 if they were living in Sydney we would

NOTE Confidence: 0.764393083703704

00:57:07.440 --> 00:57:09.865 see them just coming in as our patients.

NOTE Confidence: 0.764393083703704

00:57:09.870 --> 00:57:11.590 They have just traveled five

NOTE Confidence: 0.764393083703704

00:57:11.590 --> 00:57:14.094 hours so we're going to be doing

NOTE Confidence: 0.764393083703704

00:57:14.094 --> 00:57:15.889 them in the sleep laboratory.

NOTE Confidence: 0.764393083703704

00:57:15.890 --> 00:57:19.117 I would say that probably the Group

NOTE Confidence: 0.764393083703704

00:57:19.117 --> 00:57:21.370 of neuromuscular patients we bring

NOTE Confidence: 0.764393083703704

00:57:21.370 --> 00:57:24.121 into the into the lab most frequently

NOTE Confidence: 0.764393083703704

00:57:24.121 --> 00:57:27.045 would be our many of our MMD pay a LS

NOTE Confidence: 0.764393083703704

00:57:27.045 --> 00:57:29.170 patience with the tricky upper Airways

NOTE Confidence: 0.764393083703704

00:57:29.170 --> 00:57:31.570 that no matter what we're doing,

NOTE Confidence: 0.764393083703704

00:57:31.570 --> 00:57:32.762 they still got up.

NOTE Confidence: 0.764393083703704

00:57:32.762 --> 00:57:34.919 It why obstruction and trying to make

NOTE Confidence: 0.764393083703704

00:57:34.919 --> 00:57:37.047 sure it's not us or something about

NOTE Confidence: 0.764393083703704

00:57:37.047 --> 00:57:38.919 the machine that you know for some

NOTE Confidence: 0.764393083703704

00:57:38.919 --> 00:57:40.604 of them it is just hyper reflexive

NOTE Confidence: 0.764393083703704

00:57:40.604 --> 00:57:42.056 they had in the upper airway.

NOTE Confidence: 0.764393083703704

00:57:42.060 --> 00:57:42.920 No matter what you do,

NOTE Confidence: 0.764393083703704

00:57:42.920 --> 00:57:44.045 they're still going to have

NOTE Confidence: 0.764393083703704

00:57:44.045 --> 00:57:44.720 upper airway obstruction.

NOTE Confidence: 0.764393083703704

00:57:44.720 --> 00:57:46.322 But to give them the best

NOTE Confidence: 0.764393083703704

00:57:46.322 --> 00:57:47.773 possible outcome we will bring

NOTE Confidence: 0.764393083703704

00:57:47.773 --> 00:57:49.418 them into the sleep laboratory.

NOTE Confidence: 0.764393083703704

00:57:49.420 --> 00:57:51.280 But I would say probably only

NOTE Confidence: 0.764393083703704

00:57:51.280 --> 00:57:52.889 about 20 banknotes hard because

NOTE Confidence: 0.764393083703704

00:57:52.889 --> 00:57:54.695 of the last couple of years.

NOTE Confidence: 0.764393083703704

00:57:54.700 --> 00:57:56.866 We haven't had the sleep laboratory

NOTE Confidence: 0.764393083703704

00:57:56.866 --> 00:57:58.940 there closed down one at a time,

NOTE Confidence: 0.764393083703704

00:57:58.940 --> 00:58:01.550 but probably about.

NOTE Confidence: 0.764393083703704

00:58:01.550 --> 00:58:03.894 20% of our patients are coming in or

NOTE Confidence: 0.764393083703704

00:58:03.894 --> 00:58:07.454 30% a lot of them are being set up.

NOTE Confidence: 0.764393083703704

00:58:07.460 --> 00:58:10.202 But back home or just coming

NOTE Confidence: 0.764393083703704

00:58:10.202 --> 00:58:12.030 into house that day.

NOTE Confidence: 0.764393083703704

00:58:12.030 --> 00:58:14.558 And metric here models of in Ivy City.

NOTE Confidence: 0.875010844285714

00:58:15.310 --> 00:58:16.153 Great, thank you.

NOTE Confidence: 0.875010844285714

00:58:16.153 --> 00:58:17.277 Let's see another question,

NOTE Confidence: 0.875010844285714

00:58:17.280 --> 00:58:18.336 another excellent talk.

NOTE Confidence: 0.875010844285714

00:58:18.336 --> 00:58:20.606 Thank you so much with the

NOTE Confidence: 0.875010844285714

00:58:20.606 --> 00:58:22.318 auto adjusting ipat modes.

NOTE Confidence: 0.875010844285714

00:58:22.320 --> 00:58:24.516 Can we use it in patients

NOTE Confidence: 0.875010844285714

00:58:24.516 --> 00:58:25.248 with hypoventilation?

NOTE Confidence: 0.875010844285714

00:58:25.250 --> 00:58:27.986 Given concern of variable title volume

NOTE Confidence: 0.860696094

00:58:28.930 --> 00:58:30.115 and the answer is yes

NOTE Confidence: 0.860696094

00:58:30.115 --> 00:58:31.300 and that's why I always.

NOTE Confidence: 0.860696094

00:58:31.300 --> 00:58:33.684 I tend to start in a fixed pressure

NOTE Confidence: 0.860696094

00:58:33.684 --> 00:58:36.538 and then by a remotely I can see if

NOTE Confidence: 0.860696094

00:58:36.538 --> 00:58:38.899 they're not leaking then I'm very happy.

NOTE Confidence: 0.860696094

00:58:38.900 --> 00:58:41.378 And because remotely logging machines you

NOTE Confidence: 0.860696094

00:58:41.378 --> 00:58:43.848 can actually change from fixed to to,

NOTE Confidence: 0.860696094

00:58:43.850 --> 00:58:45.530 you know like the the.

NOTE Confidence: 0.860696094

00:58:45.530 --> 00:58:48.056 IE mode or something like that.

NOTE Confidence: 0.860696094

00:58:48.060 --> 00:58:50.076 Oh so the IE mode so you're just you're

NOTE Confidence: 0.860696094

00:58:50.076 --> 00:58:52.028 not talking about the volume target,

NOTE Confidence: 0.860696094

00:58:52.030 --> 00:58:53.915 you're just talking about the

NOTE Confidence: 0.860696094

00:58:53.915 --> 00:58:55.423 at the epac itself.

NOTE Confidence: 0.860696094

00:58:55.430 --> 00:58:56.566 Auto epub itself, yes,

NOTE Confidence: 0.860696094

00:58:56.566 --> 00:58:59.070 and we will often if a patient is

NOTE Confidence: 0.860696094

00:58:59.070 --> 00:59:01.632 leaking a lot rather than using volume

NOTE Confidence: 0.860696094

00:59:01.632 --> 00:59:03.583 targeted pressure support with AE

NOTE Confidence: 0.860696094

00:59:03.583 --> 00:59:05.857 will use fixed pressure support and

NOTE Confidence: 0.860696094

00:59:05.860 --> 00:59:11.088 then use the the the the auto E Pebble

NOTE Confidence: 0.860696094

00:59:11.088 --> 00:59:14.066 am with them making a little bit

NOTE Confidence: 0.860696094

00:59:14.066 --> 00:59:15.880 hard at the moment because of other.

NOTE Confidence: 0.860696094

00:59:15.880 --> 00:59:17.338 Things that are happening with FDA

NOTE Confidence: 0.860696094

00:59:17.338 --> 00:59:19.488 with one of the devices that does that,

NOTE Confidence: 0.860696094

00:59:19.490 --> 00:59:21.380 but the device that did do that,

NOTE Confidence: 0.860696094

00:59:21.380 --> 00:59:25.292 we would often use fixed pressure

NOTE Confidence: 0.860696094

00:59:25.292 --> 00:59:27.900 support with a variable.

NOTE Confidence: 0.860696094

00:59:27.900 --> 00:59:30.217 The the problem with the Rays Med

NOTE Confidence: 0.860696094

00:59:30.217 --> 00:59:31.535 devices that patients leaking

NOTE Confidence: 0.860696094

00:59:31.535 --> 00:59:33.327 a lot and you want the AE.

NOTE Confidence: 0.860696094

00:59:33.330 --> 00:59:35.282 You also have to use the the IBEX

NOTE Confidence: 0.860696094

00:59:35.282 --> 00:59:37.698 mode as well and then you've got to

NOTE Confidence: 0.860696094

00:59:37.698 --> 00:59:39.780 think about what they're leaking alot.

NOTE Confidence: 0.860696094

00:59:39.780 --> 00:59:41.138 What will I that's you know what

NOTE Confidence: 0.860696094

00:59:41.138 --> 00:59:43.017 will be I that's due in terms of the

NOTE Confidence: 0.860696094

00:59:43.017 --> 00:59:44.658 tidal volume so it becomes a little

NOTE Confidence: 0.860696094

00:59:44.658 --> 00:59:46.182 bit trickier when would stuck now

NOTE Confidence: 0.860696094

00:59:46.182 --> 00:59:48.864 with only one one device that we

NOTE Confidence: 0.860696094

00:59:48.864 --> 00:59:51.782 have access to that can do that can

NOTE Confidence: 0.860696094

00:59:51.782 --> 00:59:55.299 do 5X and the AE or a vexing the AE.

NOTE Confidence: 0.923526786

00:59:56.210 --> 00:59:58.020 Terrific thank you. How often?

NOTE Confidence: 0.923526786

00:59:58.020 --> 00:59:59.586 You know it's you know it's

NOTE Confidence: 0.923526786

00:59:59.586 --> 01:00:00.864 obviously in, you know,

NOTE Confidence: 0.923526786

01:00:00.864 --> 01:00:03.126 using the the inspiratory time well,

NOTE Confidence: 0.923526786

01:00:03.130 --> 01:00:04.906 you know with Bilevel St you

NOTE Confidence: 0.923526786

01:00:04.906 --> 01:00:06.699 know can really help you know.

NOTE Confidence: 0.923526786

01:00:06.700 --> 01:00:08.188 Improve title volume with

NOTE Confidence: 0.923526786

01:00:08.188 --> 01:00:09.304 these neuromuscular patients,

NOTE Confidence: 0.923526786

01:00:09.310 --> 01:00:11.070 how often do you wind up switching these

NOTE Confidence: 0.923526786

01:00:11.070 --> 01:00:12.370 patients over to pressure control?

NOTE Confidence: 0.857128645

01:00:13.990 --> 01:00:18.732 We we probably would have about maybe

NOTE Confidence: 0.857128645

01:00:18.732 --> 01:00:20.904 15% of our patients in pressure

NOTE Confidence: 0.857128645

01:00:20.904 --> 01:00:22.975 control and they generally are

NOTE Confidence: 0.857128645

01:00:22.975 --> 01:00:24.799 patients with neuromuscular problems

NOTE Confidence: 0.857128645

01:00:24.799 --> 01:00:27.094 and who got leak. For instance,

NOTE Confidence: 0.857128645

01:00:27.094 --> 01:00:28.718 you know where leak is a problem,

NOTE Confidence: 0.857128645

01:00:28.720 --> 01:00:30.460 so that seems to work better

NOTE Confidence: 0.857128645

01:00:30.460 --> 01:00:32.210 and you're a muscular patients.

NOTE Confidence: 0.857128645

01:00:32.210 --> 01:00:34.030 And once you get the settings right,

NOTE Confidence: 0.857128645

01:00:34.030 --> 01:00:35.390 they'll go along with anything.

NOTE Confidence: 0.857128645

01:00:35.390 --> 01:00:36.491 So they're very,

NOTE Confidence: 0.857128645

01:00:36.491 --> 01:00:38.693 very comfortable in pressure control mode.

NOTE Confidence: 0.857128645

01:00:38.700 --> 01:00:41.382 Sometimes the way we set it up the the

NOTE Confidence: 0.857128645

01:00:41.382 --> 01:00:43.704 settings for the iPad mini and iPad Max.

NOTE Confidence: 0.857128645

01:00:43.710 --> 01:00:45.579 Are so close together they may as

NOTE Confidence: 0.857128645

01:00:45.579 --> 01:00:47.788 well be in pressure control mode,

NOTE Confidence: 0.857128645

01:00:47.790 --> 01:00:49.670 but we give them a little bit of

NOTE Confidence: 0.857128645

01:00:49.670 --> 01:00:51.589 wiggle room if they just like to

NOTE Confidence: 0.857128645

01:00:51.589 --> 01:00:52.979 have a slightly they're feeling

NOTE Confidence: 0.857128645

01:00:53.037 --> 01:00:54.641 like machines imposing something

NOTE Confidence: 0.857128645

01:00:54.641 --> 01:00:56.245 on them during wakefulness.

NOTE Confidence: 0.857128645

01:00:56.250 --> 01:00:58.070 But a lot of neuromuscular

NOTE Confidence: 0.857128645

01:00:58.070 --> 01:01:00.399 patients where we use it a lot.

NOTE Confidence: 0.857128645

01:01:00.400 --> 01:01:02.168 They tend to go along with it and

NOTE Confidence: 0.857128645

01:01:02.168 --> 01:01:03.886 they find it actually quite quite

NOTE Confidence: 0.857128645

01:01:03.886 --> 01:01:06.024 comfortable and they like that idea of

NOTE Confidence: 0.857128645

01:01:06.024 --> 01:01:07.830 being being pushed out and expand it.

NOTE Confidence: 0.857128645

01:01:07.830 --> 01:01:08.610 They'll say, oh,

NOTE Confidence: 0.857128645

01:01:08.610 --> 01:01:10.170 I can actually feel the air

NOTE Confidence: 0.857128645

01:01:10.170 --> 01:01:11.030 getting down there.

NOTE Confidence: 0.857128645

01:01:11.030 --> 01:01:12.446 Gonna be careful they might actually

NOTE Confidence: 0.857128645

01:01:12.446 --> 01:01:14.017 be sore for the first couple

NOTE Confidence: 0.857128645

01:01:14.017 --> 01:01:15.447 of days because they're moving.

NOTE Confidence: 0.857128645

01:01:15.450 --> 01:01:17.382 Maybe some ribs and some joints

NOTE Confidence: 0.857128645

01:01:17.382 --> 01:01:19.448 they haven't moved for a long time,

NOTE Confidence: 0.857128645

01:01:19.450 --> 01:01:21.028 but it can often be very,

NOTE Confidence: 0.857128645

01:01:21.030 --> 01:01:23.130 very effective and very comfortable for them.

NOTE Confidence: 0.857128645

01:01:23.130 --> 01:01:25.181 And again by remote monitoring like we

NOTE Confidence: 0.857128645

01:01:25.181 --> 01:01:27.700 could go home and gradually increase that.

NOTE Confidence: 0.857128645

01:01:27.700 --> 01:01:28.984 And to a point where they

NOTE Confidence: 0.857128645

01:01:28.984 --> 01:01:30.200 no longer saw in there.

NOTE Confidence: 0.857128645

01:01:30.200 --> 01:01:32.016 You might be getting a decent size spread.

NOTE Confidence: 0.791443554

01:01:32.630 --> 01:01:33.894 Terrific, well thank you.

NOTE Confidence: 0.791443554

01:01:33.894 --> 01:01:35.680 Well, we're at time so otherwise we

NOTE Confidence: 0.791443554

01:01:35.680 --> 01:01:37.580 would keep asking you questions I think,

NOTE Confidence: 0.791443554

01:01:37.580 --> 01:01:39.078 but it's really been such a pleasure

NOTE Confidence: 0.791443554

01:01:39.078 --> 01:01:40.929 is really a pleasure to have you here.

NOTE Confidence: 0.791443554

01:01:40.930 --> 01:01:42.820 Thank you so much for joining us.

NOTE Confidence: 0.850592329166666

01:01:43.370 --> 01:01:44.354 Well it was delightful.

NOTE Confidence: 0.850592329166666

01:01:44.354 --> 01:01:45.830 Thank you so much for asking

NOTE Confidence: 0.850592329166666

01:01:45.884 --> 01:01:47.312 me and it's a pity I can't

NOTE Confidence: 0.850592329166666

01:01:47.312 --> 01:01:48.727 actually see you in in real life.

NOTE Confidence: 0.850592329166666

01:01:48.730 --> 01:01:53.110 But hopefully ATS might be on.

NOTE Confidence: 0.850592329166666

01:01:53.110 --> 01:01:54.094 Barring Omicron,

NOTE Confidence: 0.850592329166666

01:01:54.094 --> 01:01:56.554 so we'll see what happens.

NOTE Confidence: 0.850592329166666

01:01:56.560 --> 01:01:57.530 OK, really?

NOTE Confidence: 0.84600163

01:01:57.540 --> 01:01:58.800 So thank you. Thank you so much.

NOTE Confidence: 0.84600163

01:01:58.800 --> 01:02:01.024 Enjoy your day. Bye bye bye everyone bye

NOTE Confidence: 0.87854743

01:02:02.240 --> 01:02:02.690 bye.

NOTE Confidence: 0.6174963

01:02:05.120 --> 01:02:05.420 Please.