



Nx2me™ Connected Health

Connects clinicians with their home hemodialysis patients, enabling timely exchange of health information and improving the patient experience

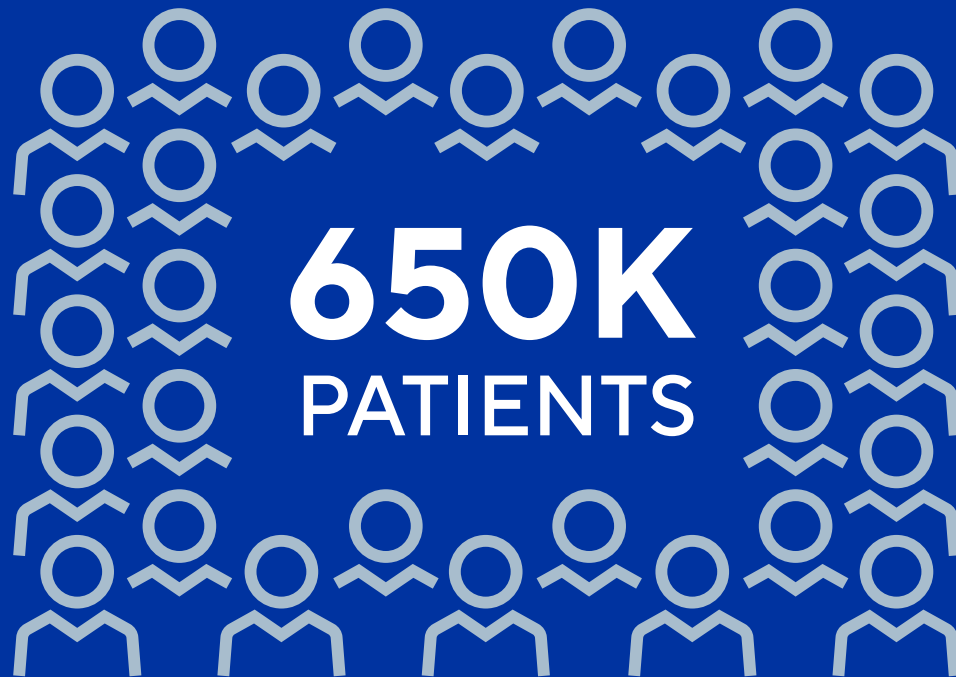




Why Connected Health?

Dialysis population growth is expected to challenge the system

2025 Dialysis Outlook¹⁻³





Why Connected Health?

The Advancing American Kidney Health Executive Order



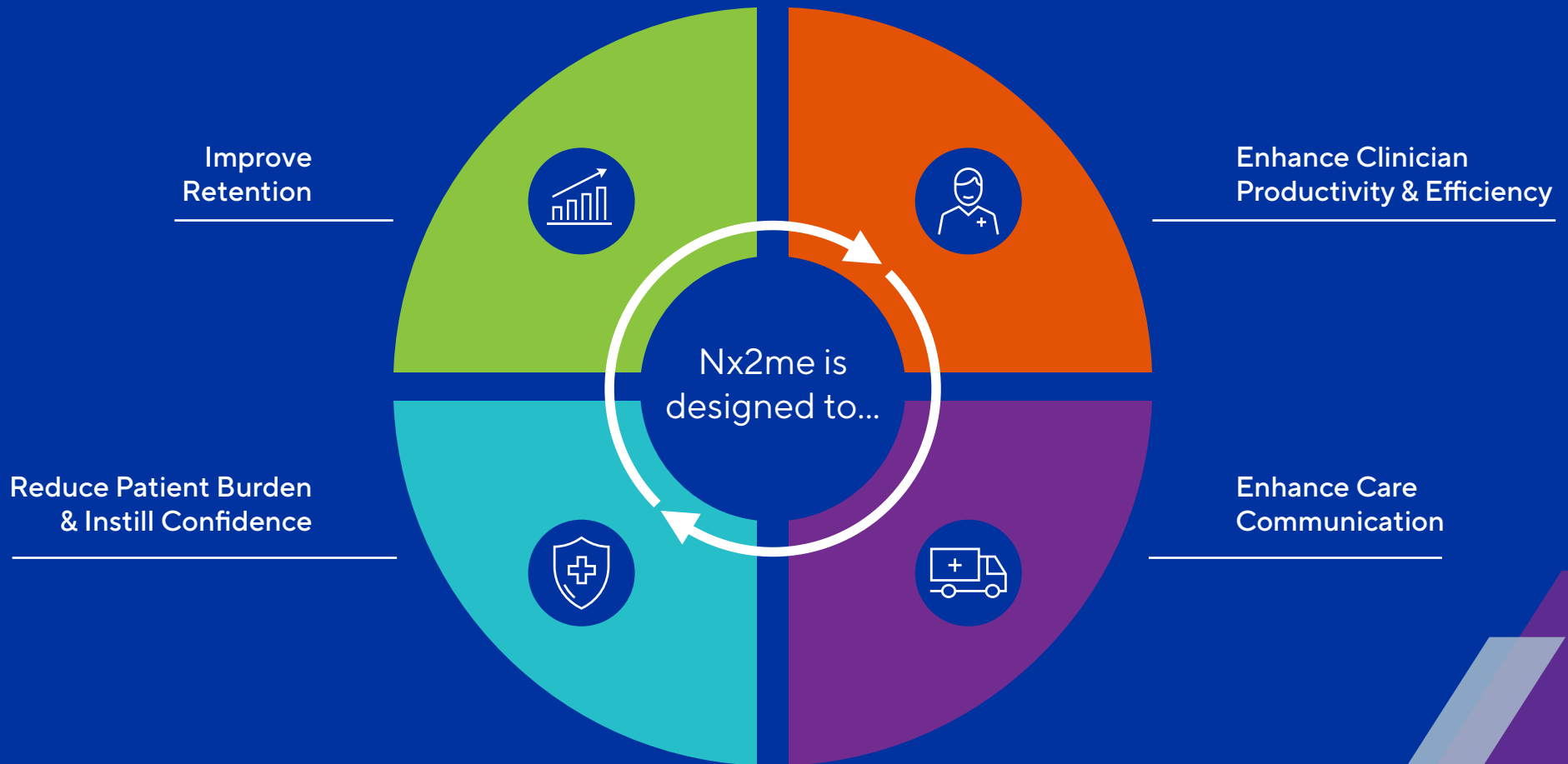
- Calls for 50% of dialysis patients to be dialyzing at home by 2025.^{1,2}

50%
HOME BY 2025



Nx2me Overview

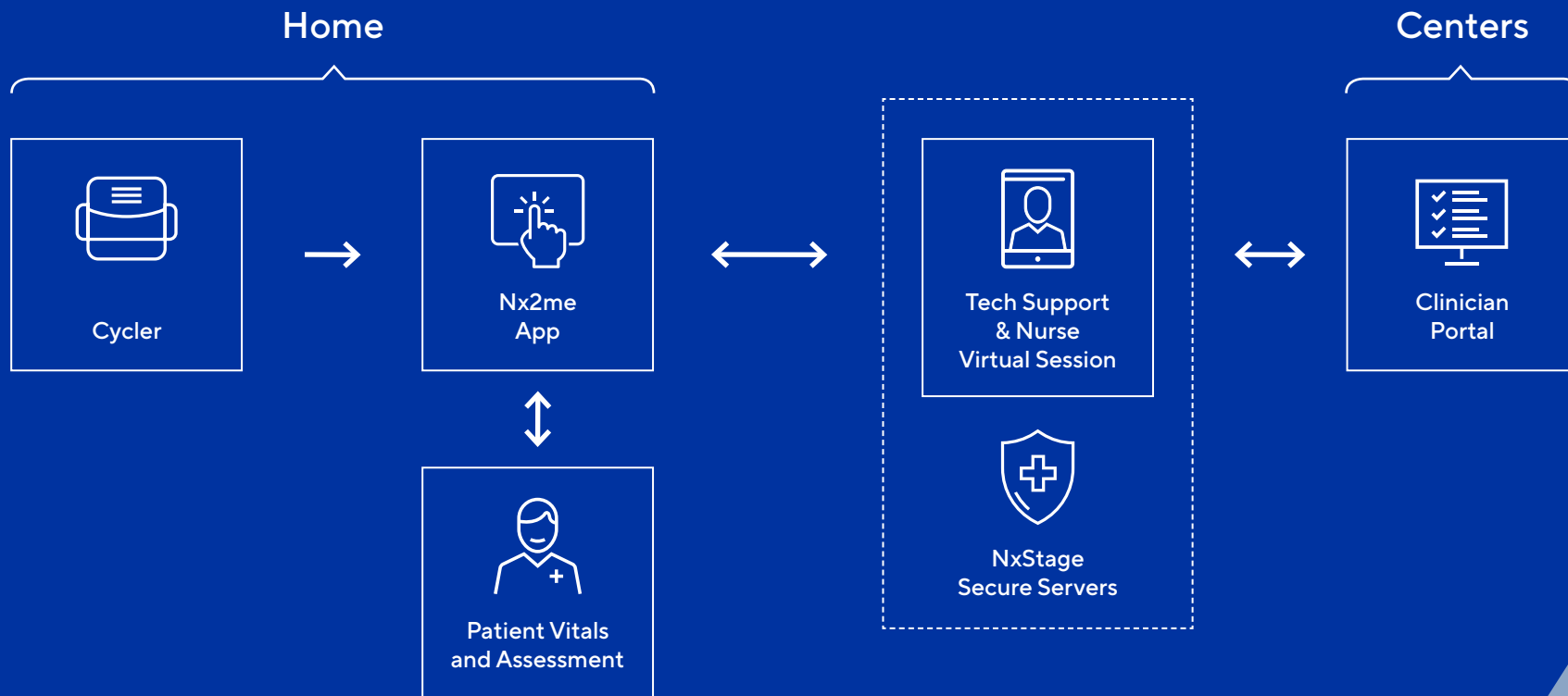
Connected Health can play a key role in reaching 50% by 2025





Nx2me Overview

Data captured from patients is available to clinicians and NxStage Technical Support



Nx2me works over a Wi-Fi network established at the patient's home. If a patient doesn't have Internet service, a cell data plan may be available. All patient information is encrypted and transmitted using secure Internet protocols.





Nx2me Overview

Nx2me App

With easy-to-use navigation and large display, Nx2me is designed to give patients more confidence in their ability to perform treatments at home.

Nx2me helps to eliminate tasks performed by the patient (such as filling out flowsheets manually) or making tasks easier or less time-consuming (such as logging blood pressure or weight.)

Data collected in the Nx2me app can include:

- Treatment information directly from the NxStage HHD cyclers*
- Patient weight, blood pressure, and temperature can be captured via Bluetooth-compatible devices.
- Medications taken
- Notes and health assessments

*The Nx2me app does not control the NxStage HHD cycler.





Nx2me Overview

Nx2me Clinician Portal

Once a patient finishes a treatment, data recorded in the Nx2me app is transmitted directly to the Nx2me Clinician Portal, where it can be reviewed by clinicians. Treatment records are accessible 24/7.

The screenshot displays the Nx2me Clinician Portal interface. At the top, there is a navigation bar with tabs for DASHBOARD, PATIENTS, TREATMENTS, NEW MESSAGES, EQUIPMENT, ADMIN, REMOTE VIEW, and VIRTUAL SESSION. The main content area is divided into three summary cards: 'Flowsheet Status' (1 New, 0 Pending, 0 Call Patient), 'Flowsheet Statistics' (0 Flowsheets with 3+ alerts, 1 Flowsheet with 1-2 alerts, 6 Unconfirmed flowsheets), and 'Patients' (5 Inactive, 11 Need Settings defined, 17 Need Alert Criteria defined). Below these is a 'Flowsheet Summary' table with columns for Alerts, Treatment Date, Patient Name, Site of Care, ID#, Flowsheet Status, Treatment Notes, Treatment Duration, Dialysis (Processed/Dial), Ultrafiltration, Weight (Pre/Dia/Post), and Priced. The table contains several rows of data, with one row highlighted in red. At the bottom, there is a 'Patient List' section and a 'Dashboard Status' indicator.

Alerts	Treatment Date	Patient Name	Site of Care	ID#	Flowsheet Status	Treatment Notes	Treatment Duration	Dialysis (Processed/Dial)	Ultrafiltration	Weight (Pre/Dia/Post)	Priced
	12/15/21	Demetrius, Alan	024168	124168	New		44min	12/148L	0L	-100.0kg	
	12/15/21	Demetrius, Morgan	015162	---	Approved		1.0hr	01/23L	0L	-100.0kg	
1	12/15/21	Demetrius, Alan	024168	124168	Approved		101min	20/140.0L	0L	100.0/100.0kg	✓
	12/15/21	Demetrius, Alan	024168	124168	Approved		50min	00/100.0L	0L	100.0/100.0kg	
	12/15/21	Demetrius, Morgan	015162	---	Approved		1.0hr	00/100.0L	0L	-100.0kg	
	12/15/21	Demetrius, Morgan	015162	---	Approved		83min	11/23L	0L	-100.0kg	
	12/15/21	Demetrius, Morgan	015162	---	Approved		6.0hr	01/23L	0L	-100.0kg	





Nx2me Overview

Virtual Sessions & Picture Sharing



Virtual Sessions

- Streaming video and cyclor data allows for faster and more effective support by NxStage Technical Support and nurses.
- View patient's current rates, volume, pressures, and cyclor status – as well as Treatment Cyclor Values (such as Alarms) from prior to the Virtual Session.



Picture Sharing

- May enhance communication with clinician



Virtual Session

Nurse Virtual Session View



Virtual Session

Patient View





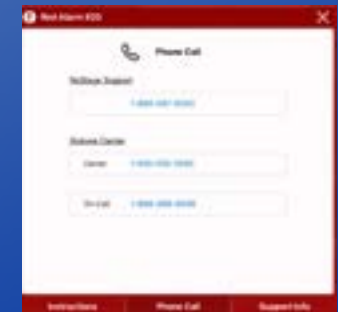
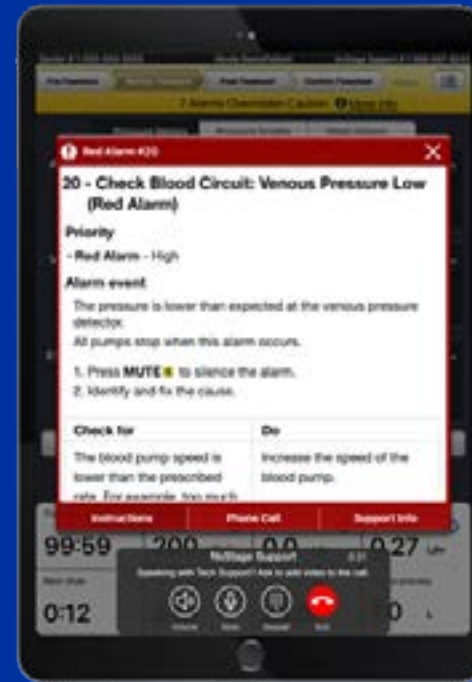
Nx2me Overview

Nx2me App Phone Calls



Patients can call NxStage Technical Support or their Dialysis Center directly from Nx2me with a Wi-Fi Internet connection

- Accessible to patients directly within the Alarm Troubleshooting window
- Available at any time from the Nx2me App Menu
- Reduces patient burden in needing a secondary phone device to call for support during treatment
- Virtual Sessions can easily be added to a Phone Call by NxStage Technical Support or a Nurse
- Dialysis Center phone numbers are configurable within Nx2me App Settings in the Clinician Portal

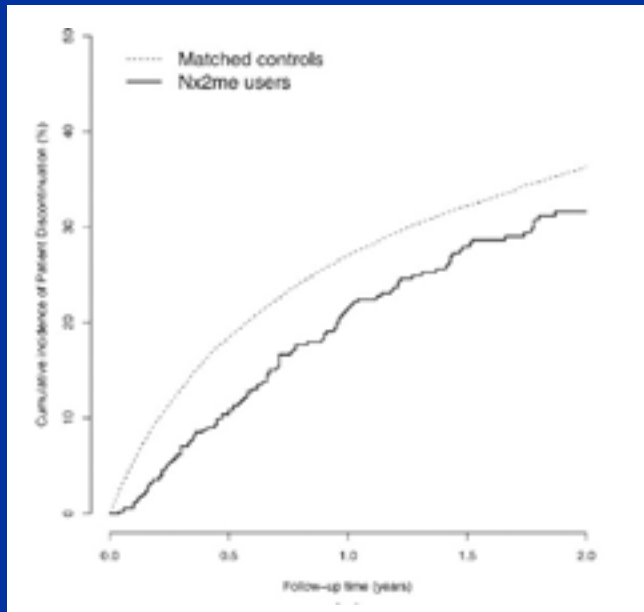




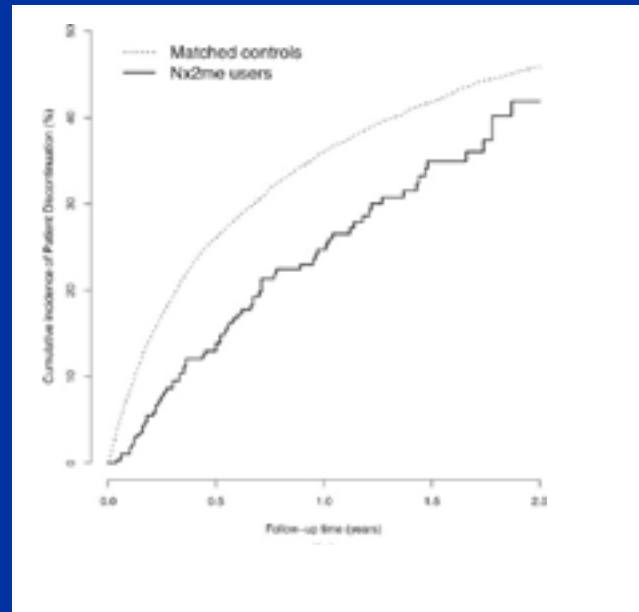
Retention

Nx2me delivers quantifiable benefits such as enhanced therapy retention¹

All Study Patients



New HHD Patients



29%

Lower therapy discontinuation rate (excluding death and transplant)¹

Source: 1. Weinhandl ED, et al. Hemodial Int. 2018 Jul;22(3):318-327. doi: 10.1111/hdi.12621.





Retention

Potential Key Benefits

1. Adherence

Clinicians may monitor and support treatment adherence.

2. Early Intervention

Clinicians may identify health problems before unscheduled care is needed (blood, arterial, or venous pressures running too high).

3. Alerts

Notifications (to patients and nurses) when key clinical parameters deviate from preestablished norms may help support patient case management.

Flowsheet Summary

Start Date: 1/1/2019 End Date: 6/30/2019 View

Status	Alerts	Treatment Date	Patient Name	Date of Birth	Center Patient ID	Flowsheet Status	Treatment Notes	Treatment Duration	Dialysate (Processed/Rx)	Ultrafiltration	Weight (Post/Dry-Rx)	Printed
<input type="checkbox"/>		5/22/2019	DemoPatient, Mark	7/29/1966	11122.1	New	<input type="checkbox"/>	156 min	30.0 / 25.0 L	1.0 L	81.6 / 76.8 kg	
<input type="checkbox"/>	3	2/26/2019	DemoPatient, Chris	2/29/1948	11111	Approved	<input type="checkbox"/>	129 min	28.7 / 25.0 L	3.5 L	77.1 / 76.8 kg	
<input type="checkbox"/>	4	1/27/2019	DemoPatient, Chris	2/29/1948	11111	Approved	<input type="checkbox"/>	113 min	27.0 / 25.0 L	2.7 L	82.8 / 76.8 kg	
<input type="checkbox"/>		1/16/2019	DemoPatient, Nicole	2/12/1944	1234	Approved	<input type="checkbox"/>	27 min	1.1 / 30.0 L	0.0 L	65.0 / 65.0 kg	

1 - 4 of 4 record(s)





Retention

Flowsheet Summary Report
8/1/2016 - 8/31/2016

Patient Name: Mark Bessafelad Date of Birth: 7/28/1968 Center Patient ID: 3112333 Number of treatments per week: 4.0 Patient Access Type: #Visits

Treatment Date	Treatment Location (Site)	Release (g) (Treatment/kg)	UF (l)	Weight (kg) (Actual/Target)	Kt/V (mg/min/1.73m ²)	Pre-lyc. Weight (kg) (Pre/Post)	Post-lyc. Weight (kg) (Pre/Post)	Pre-lyc. Weight (kg) (Pre/Post)	Post-lyc. Weight (kg) (Pre/Post)	SP200 (mmHg)	Delta (mmHg)
8/1/2016	156	30.0 / 25.0	3.0	81.6 / 76.8	120 / 80	120 / 80	120 / 80	120 / 80	120 / 80	-	55
8/2/2016	154	28.8 / 25.0	2.3	78.2 / 76.8	147 / 87	151 / 73	133 / 70	123 / 75	123 / 75	26	35
8/18/2016	156	31.5 / 25.0	3.3	80.5 / 76.8	103 / 66	112 / 68	115 / 31	130 / 61	130 / 61	42	35
8/18/2016	158	33.3 / 25.0	3.0	80.2 / 76.8	103 / 60	107 / 55	120 / 62	141 / 68	141 / 68	8	45
Average	156	30.7 / **	3.0	80.7 / **	107 / 74	107 / 74	107 / 74	107 / 74	107 / 74	25	35

Total Flowsheets: 4

This report displays Confirmed and unconfirmed Flowsheet information.
* = Unconfirmed Flowsheet, ** = Current value as of 1/6/2016, ** = Not calculated

Flowsheet Alert

Flowsheet Calendar Report
8/22/2016 - 8/31/2016

Patient Name: Cheryl Bessafelad Date of Birth: 2/29/1948 HHA: 1234567890

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Aug 22	23	24	25	26	27
100%	100%	100%	100%	100%	100%
28	29	30	31	Sept 1	2
100%	100%	100%	100%	100%	77%
3	4	5	6	7	8
100%	100%	100%	100%	100%	100%
9	10	11	12	13	14
100%	100%	100%	100%	100%	100%
15	16	17	18	19	20
87%	100%	100%	100%	100%	100%
21	22	23	24	25	26
87%	100%	100%	100%	100%	100%

Summary:
Dialysis: 87% (30.0 l) Ave. processed: 26.7 L (89%)
Treatments per week: 6.7 (4.2) Ave. flowsheets per week: 6.2 (32%)

This report displays Confirmed and unconfirmed Flowsheet information.
% = Dialysis processed / Dialysis prescribed
Flowsheet Calendar uses 4.0 L per 1.73m² Kt/V. ** = Current value as of 8/22/2016

Nx2me Reports

Flowsheet Summary & Flowsheet Calendar Report

These reports help clinicians better monitor patient adherence and health status to determine if timely intervention is needed.





Retention



Adapting to Patients' Unique Needs

Patients receive alerts in the Nx2me App when their prescription has been updated. Additional alerts for vitals, such as blood pressure, can also be configured to let patients know when they exceed limits set by their clinician.





Clinician Productivity & Efficiency

Billing and Nurse Productivity

Nx2me Connected Health is designed to reduce the effort of collecting flowsheets and allows for more proactive care.

Nx2me helps clinicians better monitor:

- Automatic capture of NxStage HHD cyclers data
- Timely access to records
- Electronic flowsheets
- Ability to interface with EMR and billing systems

Patient Name	Alize Demetriadou	Date Of Birth	6/24/1958	Flowchart Status	Pending
MRN	12486	Modified by	Name@Address	Treatment ID	917
NxStage Patient ID	9116	Modified time	6/24/2021 4:28 PM	Auto-Confirmed (0.2 days)	9/4/2021 4:21 PM
Summary		Treatment Dates: 6/24/2021 - 7/06/2021 (13 Days)		Total ultra-pure volume	0.0L
Start Time	1:11 PM	Total Ultra-pure	0.0L	Total Cycler Alarms	0
End Time	3:11 PM	Total ultra-pure processed	21.0L	Total Cycler Alarms	0
Time to be treated	140 min	Total volume processed	87.3L	Total Flowchart Alerts	0
Prescriptions		Accession		Equipment	
Number of cylinders per week	0.0	Like issue?	No	Cartridge type	CAH Ultra
Diagnosis volume per treatment	40.0 L	Residuals/ultra-pure left (percent)?	No	Cartridge lot #	1240
Therapy full source	7x7xFlow™ 3B	Reason for missed treatment?	No	Roll out #	4278
Diagnosis SW type	SAH-300	Any shortness of breath?	No	Roll out #	5078
Diagnosis Index	994	Any chest pain or palpitations?	No	Roll out #	2
Diagnosis potassium	994	Any dizziness problems?	No	Diagnosis present?	No
Flow fraction	2.00 L	Any change in "noisy"?	No	Water used?	NA
Average dialysis rate	0.8 L/hr	Access malice, drainage, swelling?	No	Monitor access leak detector used?	No
Average ultra-pure rate	2.16 L/hr	Access malice?	No	No/Stage Full Detection System used?	No
Water bleed flow rate	0.00 L/hr	Access issue?	No	Secondary connection cap used?	No
Trough mixed flow rate	0.00 L/hr	Infection?	No	Maintenance	
Patient source QOL	994/05	Was it stop working?	No	Upper access not exterior covered?	No
Residual group	99 group	Canister cleaning changed?	No	Roll was changed?	No
Residual alert	99	Canister, ports, occlude or damaged?	No	Can line flushed?	No
Residual alert	99	Canister, ports, occlude and flush leaky?	No	Control unit or filter replaced?	No
Pre-treatment weight	100.7 kg	Any swelling?	No	Control unit air filter cleaned?	No
Pre-treatment weight	100.7 kg	Is garment with dialyzer removed?	No	Conduct sensor tested?	No
Dry weight/PP, ultra-pure	100.0 / 100.0 kg	Dialyzer acceptance	Fail	Substrate filter replaced?	No
Weight gain	0.7 kg	Waste	Pre-Dr	Product water particle tested?	No
Weight % increase	0.7 %	Wasting BP	12470 evening	Outpatient sample blood?	No
Pre-treatment weight	100.0 kg	Wasting BP	13380 evening		
		Wasting pulse	90 bpm		
		Wasting pulse	90 bpm		
		Temperature	37.0 C		

Treatment Cycle Values										Treatment Patient Values						
Mode	Time	Dialysate		Ultra-pure		BPO alarm	AP ready	UP ready	BP ready	Flow Fraction	Alarm (s)	Time	BP ready	Pulse bpm	Access Condition	Roller Status (s)
		Flow L/hr	Volume L	Flow L/hr	Volume L											
	1:11 PM	0.0	0.0	0.0	0.1	470	-144	139	149	37.8 %	-					
	1:12 PM	0.0	0.0	0.0	0.1	470	-139	139	130	38.0 %	2.0					
	1:20 PM	0.0	0.0	0.0	0.2	470	-145	130	144	38.0 %	-					
	1:27 PM	0.0	11.2	0.0	0.3	470	-145	126	130	37.8 %	-					
Treatment	2:13 PM	0.0	13.0	0.0	0.4	470	-140	130	140	38.0 %	-					
	2:20 PM	0.0	10.0	0.0	0.0	470	-143	137	130	38.0 %	-					
	2:41 PM	0.0	10.0	0.0	0.0	470	-142	134	127	38.0 %	-					
	2:50 PM	0.0	20.0	0.0	0.0	470	-138	135	140	38.0 %	-					
	3:11 PM	0.0	21.0	0.0	0.0	470	-144	138	140	3.8 %	-					
	3:18 PM	0.0	21.0	0.0	0.0	470	-141	124	137	3.8 %	-					

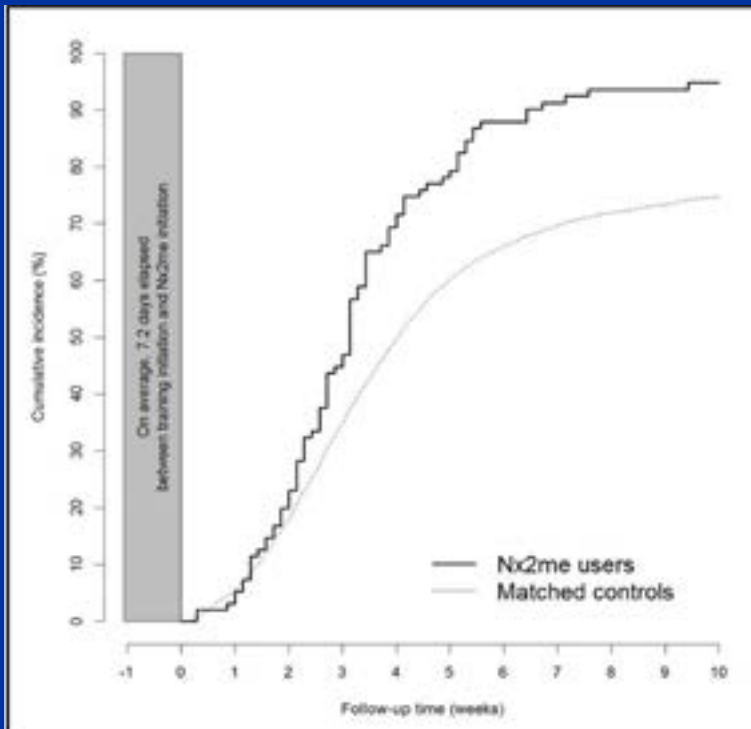
*The Nx2me app does not control the NxStage HHD cycler.





Clinician Productivity & Efficiency

Higher cumulative incidence of HHD training graduation and shorter training time¹



27%

Improvement in training graduation rates¹

1 week

Reduction in median training time¹

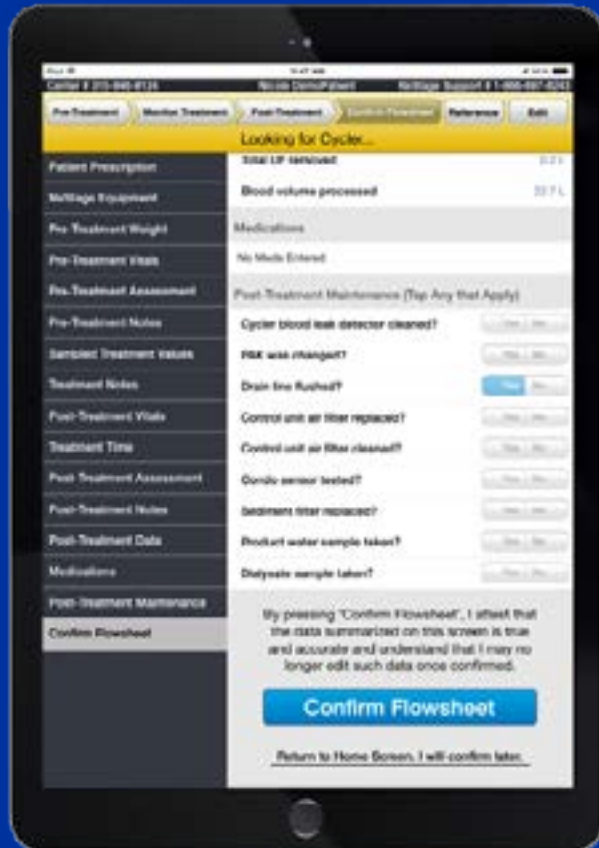
Note: In patients who initiated use of Nx2me during the first 2 weeks of HHD training and their matched controls.

Source: 1. Weinhandl ED, et al. Hemodial Int. 2018 Jul;22(2):318-327. doi:10.1111/hdi.12621.





Instill Patient Confidence



Electronic Flowsheets

The Nx2me flowsheet eliminates the burden of completing paper flowsheets, and reduces the potential for errors and non-adherence.





Instill Patient Confidence

Large Cyclor Treatment Display with Treatment Parameters

The cyclor treatment display shows treatment readings and parameters, such as arterial and venous pressure, enabling patients to respond promptly to undesirable readings.

Patient alerts are displayed when certain vitals fall outside the parameters set for their treatments. For example, if a patient's blood pressure is beyond the established range, a pop-up will instruct them to their center for further instructions.





Instill Patient Confidence

Alarms and Cautions

The Nx2me app communicates with the NxStage HHD cyclers for immediate troubleshooting of cautions and alarms. In the case of an alarm, the app will alert patients with a pop-up notification and provide step-by-step troubleshooting instructions.

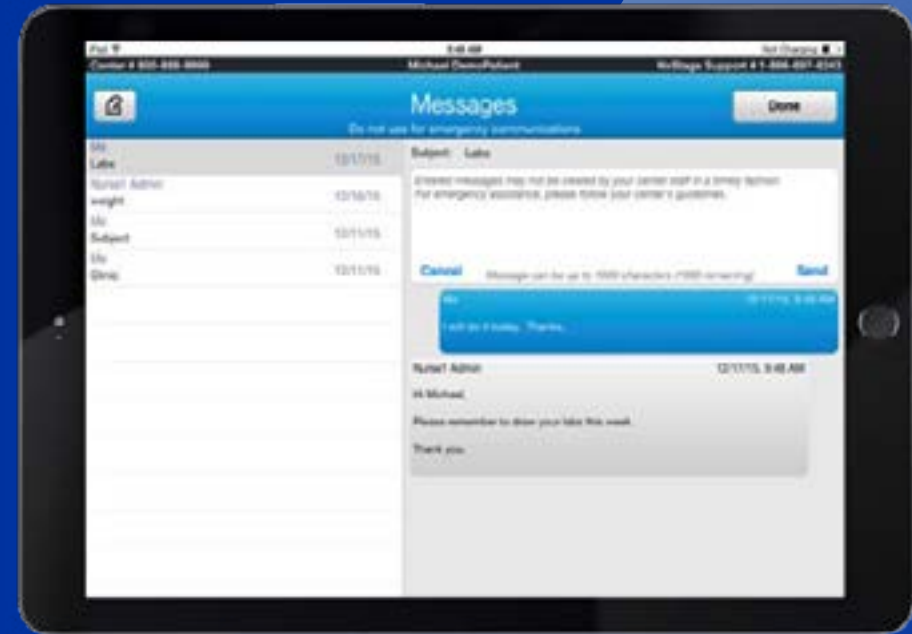




Instill Patient Confidence

Other Nx2me Capabilities for Patients

- Notes and Medications
- Messaging
- Pop-Up Reminders
- Electronic Copy of User Guide





Enhance Care Communication

Nx2me stimulates conversations between patients and their care teams that can allow for better patient assessment¹



Conversation may **identify care partner burnout** early



Strengthens patient & staff communication



Communication may assist in **identifying Solo patient candidates**



Allows for easier **reporting of dates and times medications were taken**



Encourages **two-way communication** between patient & staff

Source: 1. Koester, Lisa. Webinar. Connected Health: Clinical Findings & Intervention Strategies for Home Dialysis Patient Success. November 2019.



Risks and Responsibilities

Patients should review the following information carefully and discuss it with their doctors to decide whether home hemodialysis with NxStage systems is right for them.

Users should weigh the risks and benefits of performing home hemodialysis with NxStage systems.

Medical staff will not be present to respond to health emergencies that might happen during home treatments.

Users and their care partners will be responsible for all aspects of their hemodialysis treatments from start to finish.

Users may not experience the reported benefits of home, more frequent, or nocturnal hemodialysis with the NxStage systems.

The NxStage systems require a prescription for use.

Certain forms of home hemodialysis have additional risks.

If a doctor prescribes more frequent home hemodialysis, vascular access is exposed to more frequent use, which may lead to access-related complications, including infection of the site. Doctors should evaluate the medical necessity of more frequent treatments and discuss the risks and benefits of more frequent therapy with users.

If a doctor prescribes “solo/independent” home hemodialysis without a care partner during waking hours, risks of significant injury or death increase because no one is present to help users respond to health emergencies. If users experience needles coming out, blood loss, or very low blood pressure during solo home hemodialysis, they may lose consciousness or become physically unable to correct the health emergency. Users will need additional ancillary devices and training to perform solo home hemodialysis.

If a doctor prescribes “nocturnal” home hemodialysis at night while the user and a care partner are sleeping, risks increase due to the length of treatment time and because therapy is performed while users and their care partners are sleeping. These risks include, among other things, blood access disconnects and blood loss during sleep, blood clotting due to slower blood flow or increased treatment time or both, and delayed response to alarms when waking from sleep.

For more information on Nx2me, contact your area representative or NxStage at **1-866-697-8243**



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