



Remote Technologies
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Is the Whole World Going Remote?

We care where you are.

- Rural Disparities
- City Parking
- COVID
- Space Travel!





We care where you are.

Types of Remote Technologies

- Blood Pressure
 - Saved my husband's life!
- Continuous Glucose Monitoring
- Anticoagulation Testing Device
- Electrocardiography Devices
- Heart Rate Monitors
- Maternity Care Monitoring
 - Hand-held dopplers, weight, BP
- Pediatric At-home Monitoring
- Pulse Oximeter
- Smart Scale
- Medication Monitoring
- Patient Wearables



We care where you are.

Digital Medicine

Digital Medicines

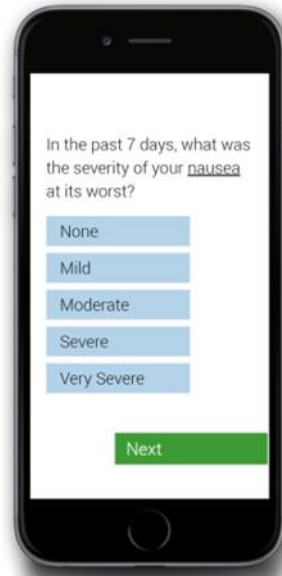
Sensors, software and analytics to transform pharmaceuticals and healthcare delivery



We care where you are.

- Remote cancer symptom monitoring
- Patients are enrolled at their routine cancer care visits
- Report symptoms weekly
- Helps patients with education and decision-making as symptoms arise
- Provides real-world data for research

Carevive - PROMPT



Welcome **Jaynedoe** [Home](#) [Log out](#)

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Please think back over **the past 7 days:** Progress:

How OFTEN did you have ARM OR LEG SWELLING?

Never Rarely Occasionally **Frequently** Almost constantly

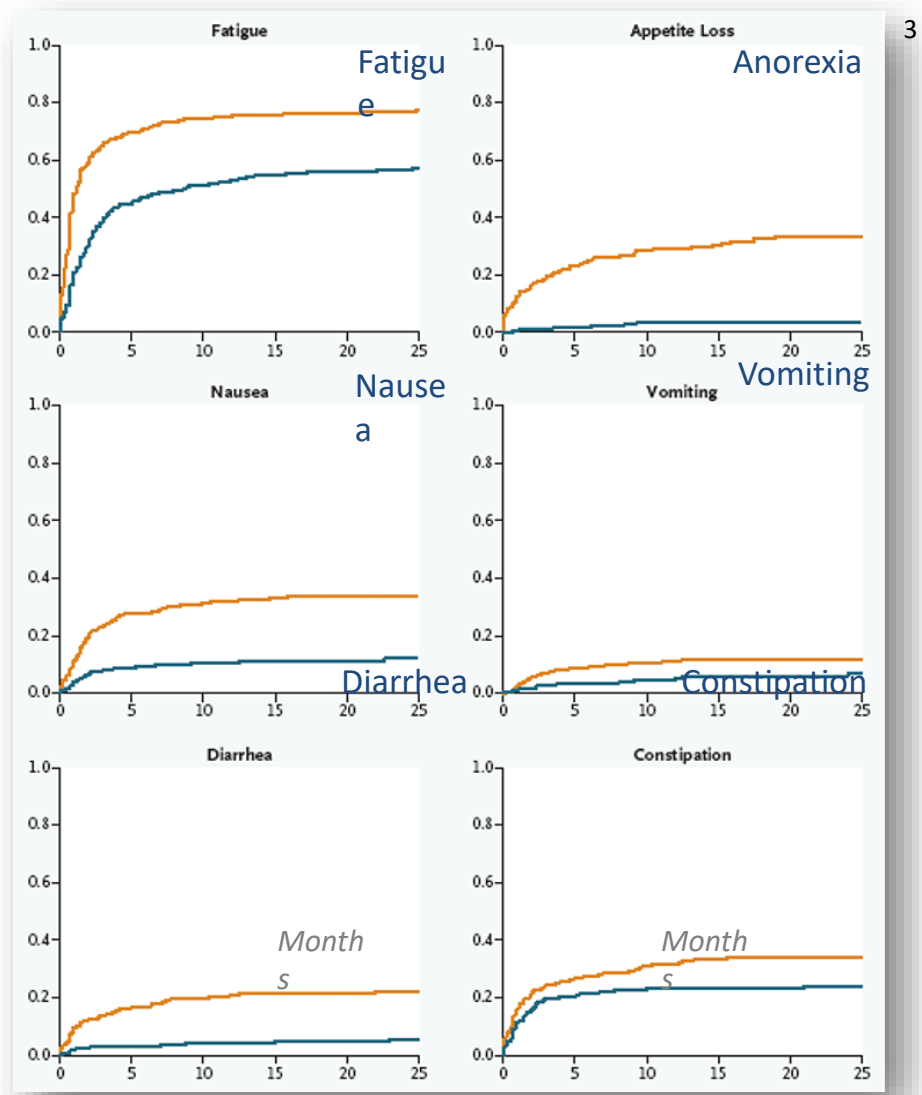
What was the SEVERITY of your ARM OR LEG SWELLING at its WORST?

None **Mild** Moderate Severe Very severe

How much did ARM OR LEG SWELLING INTERFERE with your usual or daily activities?

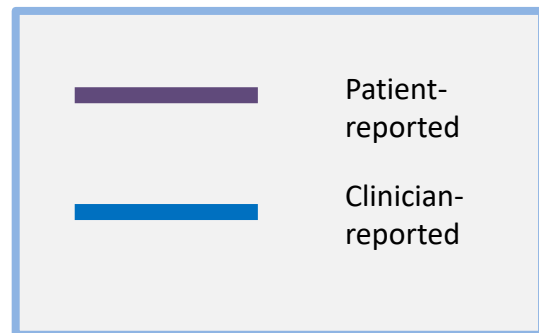
Not at all A little bit **Somewhat** Quite a bit Very much

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Patients report more symptoms when they report themselves

Clinicians don't always ask about all symptoms and make assumptions



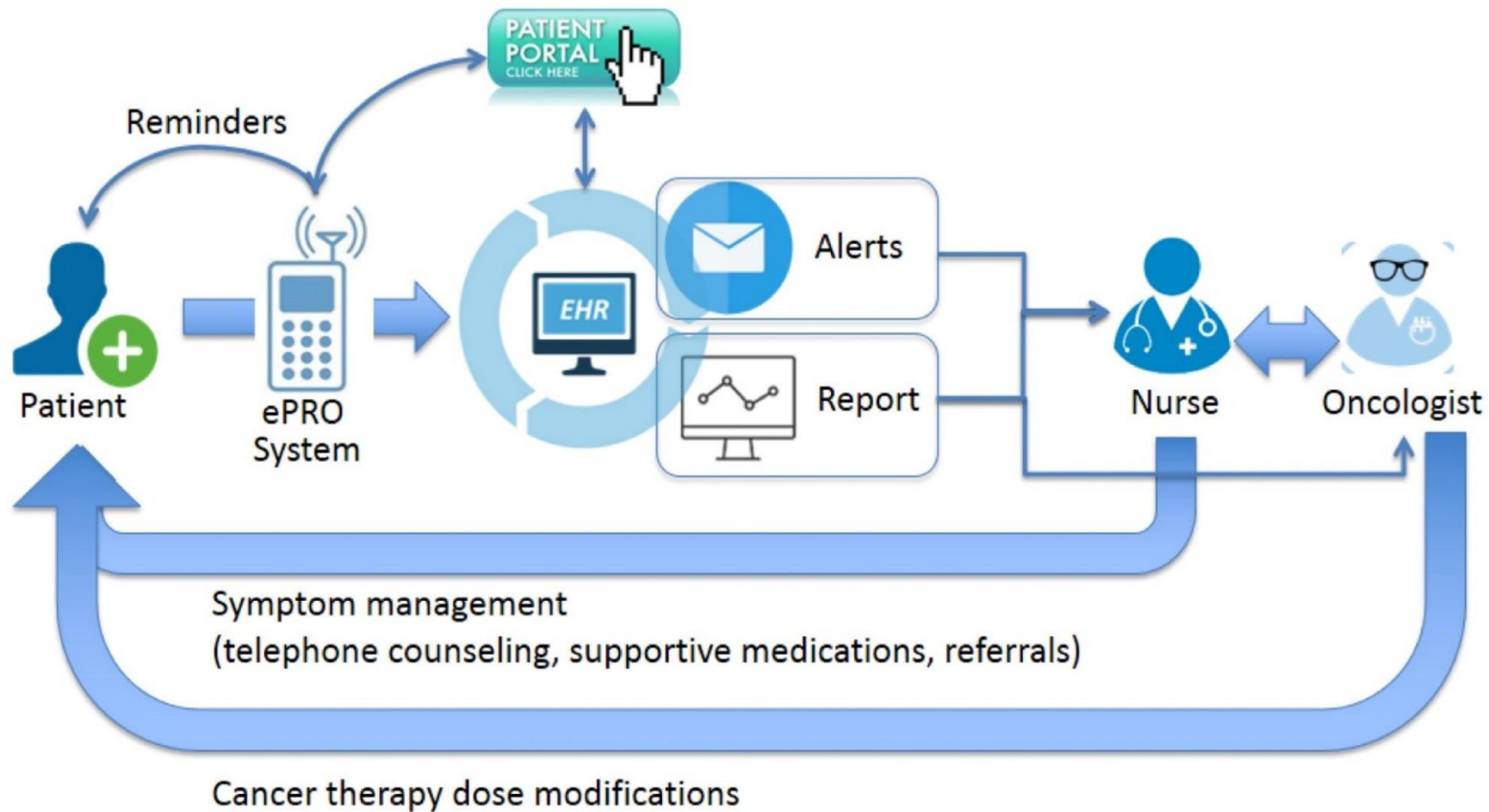
Capturing the Patient's Voice

PRO – Patient-reported outcome

ePRO – Electronic Patient-reported outcome



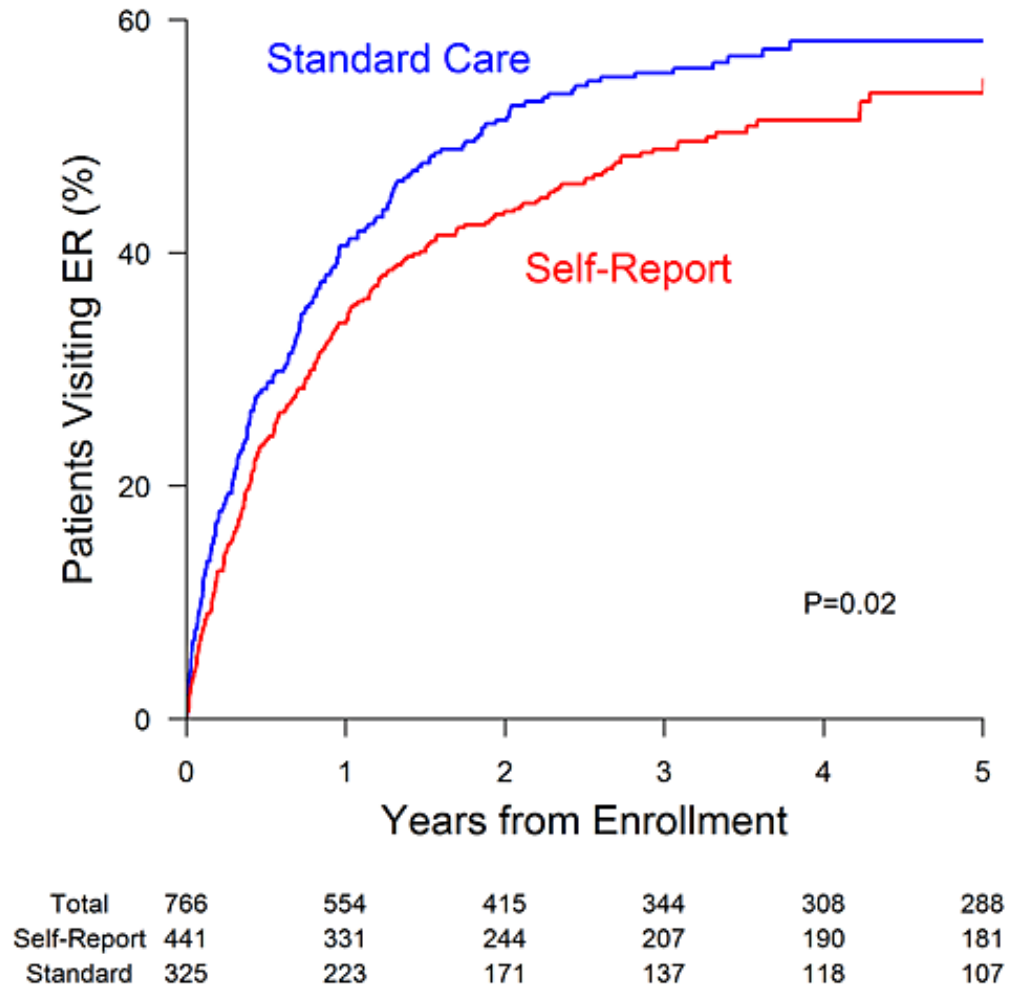
Workflow Model for Implementing ePROs in Oncology Clinical Practice



Emergency Room Visits



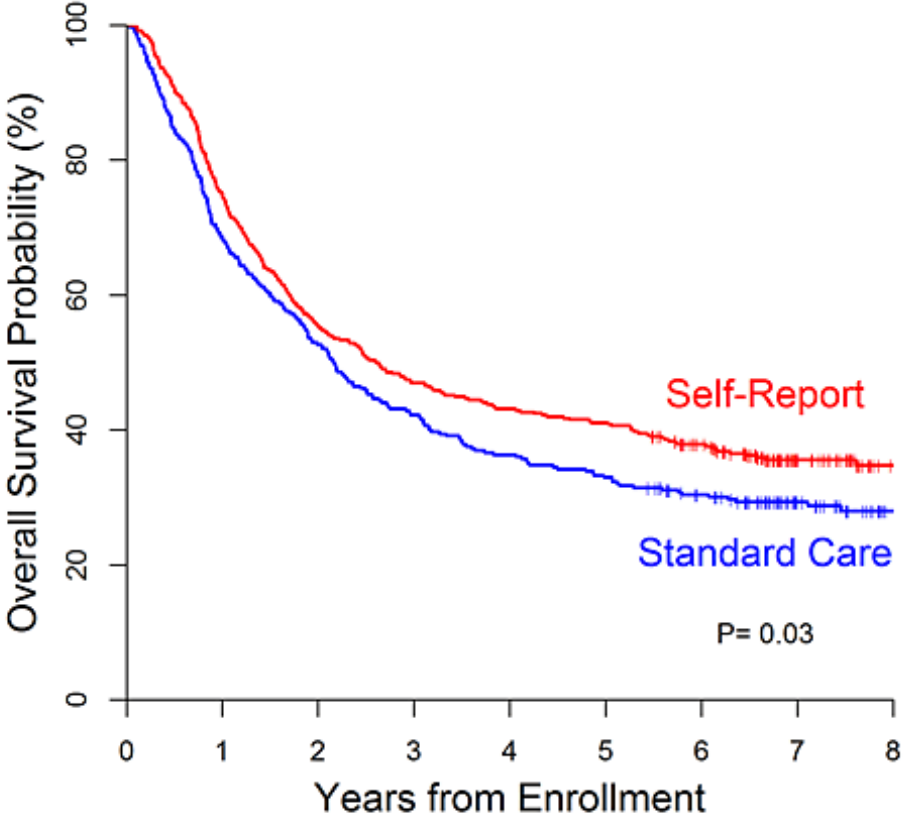
- Patients who completed ePRO symptoms visited the Emergency Room 7% less often. This was a significant difference.
- Symptom reports helped to identify symptoms early and keep patients out of the hospital.



Overall Survival



- Patients who used the ePROs lived 5.2 months longer than those who did not use ePROs in their care (31.2 vs. 26.0 months)



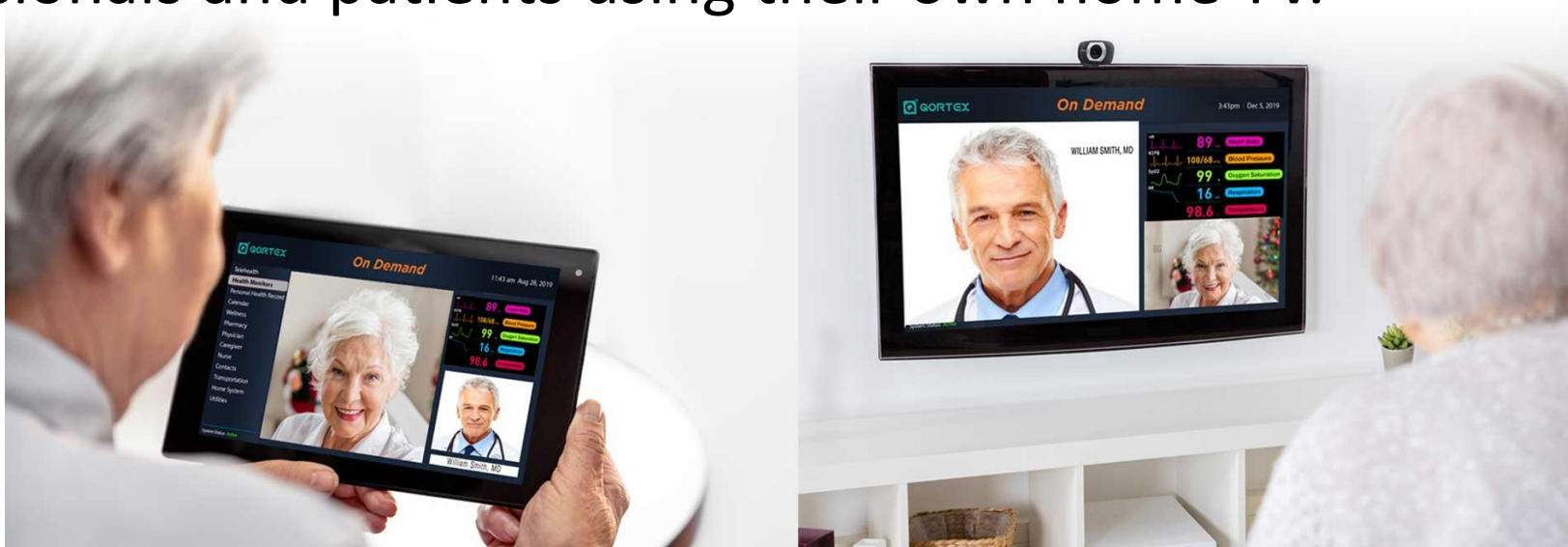
Total	766	554	415	344	308	288	237	115	60
Self-Report	441	331	244	207	190	181	148	65	33
Standard	325	223	171	137	118	107	89	50	27



MedSign

We care where you are.

- The first TV-based, simple to install, and easy to use Telehealth system
- that provides 24/7 ON-DEMAND virtual access between healthcare
- professionals and patients using their own home TV.





We care where you are.

MedSign

- *Dorothy, It's time to take your Blood Pressure medication.*
- *Mom, how are you doing?*
- Challenges: privacy, connection to the cable TV – tech must install



We care where you are.

Research Questions

- Do these technologies work?
- How easy are they to use? For which populations?
 - Connecting, understanding, accessing, Wifi
- Do they improve health care outcomes?
- Do they save \$\$?
- Do they address disparities?
- Do they invade privacy? How can we keep them HIPAA compliant?



Discussion