

Sheppard Pratt's

Measurement Based Care Initiative

*Implementation of research grade data collection, analysis and reporting
at the point-of-care*

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We are integrating health analytics and research methodologies into our clinical environments to optimize treatment and care.

Point of Care

Research & Innovation



Clinical Trials



Point of Care

Why do psychiatric treatments work much better in the 'laboratory' than in the real world?

Systematic use of PROMs improves clinical outcomes and has many secondary benefits for clinicians, health systems and payers.

Patient

*outcomes
communication
engagement
knowledge*

Clinician

*professional
development
clinical
effectiveness*

Health System

*quality
improvement
revenue*

Payers

*reimbursement
policies
value-based-care*

Why are PROMs underutilized?

Implementation of PROM at the Point-of-Care faces challenges including barriers to collection as well as utilization of data.

Point-of-Care challenges:



Data Collection

- workflow integration
 - limited time resources
 - staff turnover
- burden on patient
- accessibility/special circumstances



Data Utilization

- adoption
- clinician buy-in
- knowledge/skills

To overcome *data collection* barriers we need tools that are easy to use, fast, seamless and allow monitoring.

PROM data collection requirements:

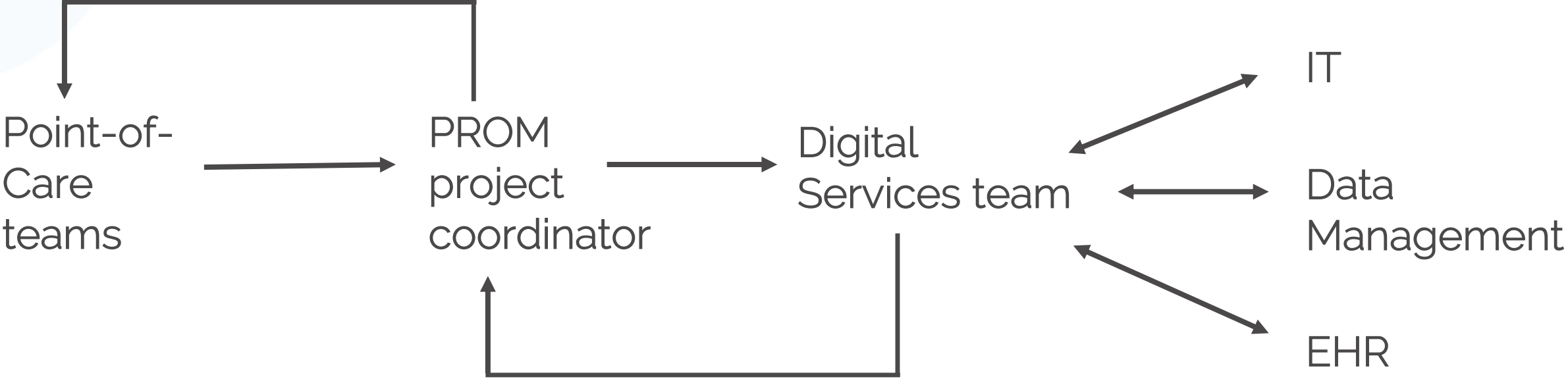
- *easy to use&train*
- *fast – short surveys, short start-up time*
- *seamless integration with existing IT*
- *needs to be monitored*

To be clinically *useful* PROM data has to be current, available, interpretable as well as relevant & accurate.

PROM data utilization requirements:

- *current*
- *easily available in the clinical encounter*
- *interpretable*
- *relevant & accurate*

*We are using an **agile** implementation process to develop solutions to overcome point-of-care challenges for data collection and utilization.*



We develop key components of our system utilizing open source technology.



Point-of-Care

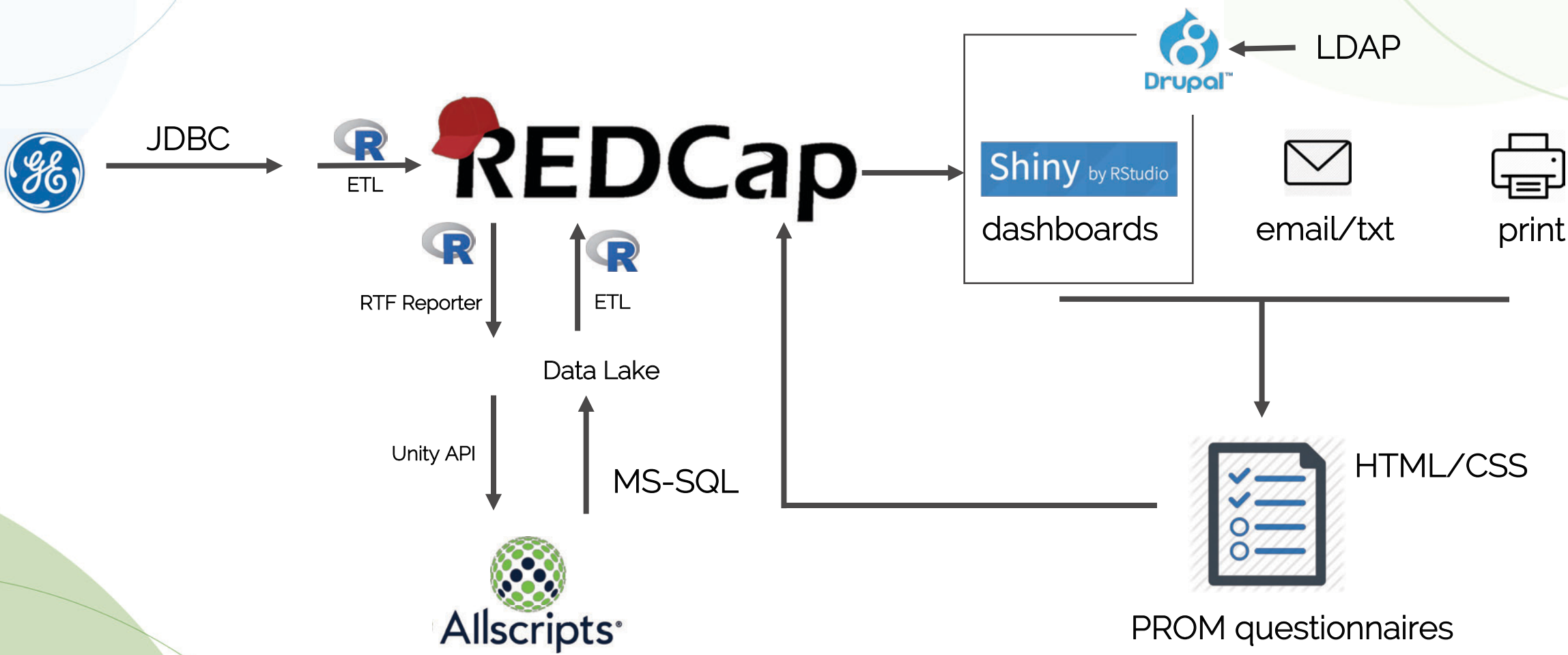
- Dashboards
- Automation
- Reporting *Toolkit*



www.PoCDART.org



Integration with other health-IT enables automation and improves quality.



Dashboards/web-applications facilitate coordination of PROM collection.

PROM DEMO

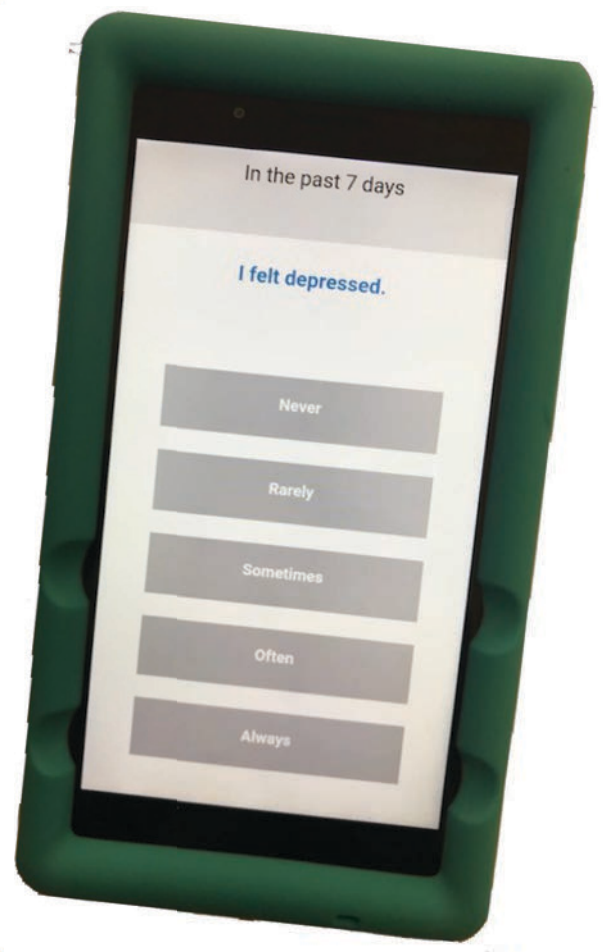
Census Board

Search:

MRN	Patient	Doctor	PROM
12345-6	Patient, Demo	Dr. Zhivago	Past Due
098765-4	Patient, Demo2	Dr. Strangelove	Past Due
98367598	Patient, Demo3	Dr. No	Past Due
Neuro01-Test	Patient 5, Test	Dr. Evil	Up To Date
Neuro01-Test	Patient 6, Test	Dr. Evil	Upcoming
001234-BHP	Patient 7, Test	Dr. Zhivago	Due
Neuro01-Test	Patient 8, Test	Dr. Zhivago	Enroll



PROM surveys HTML/CSS to allow full control over UI design.



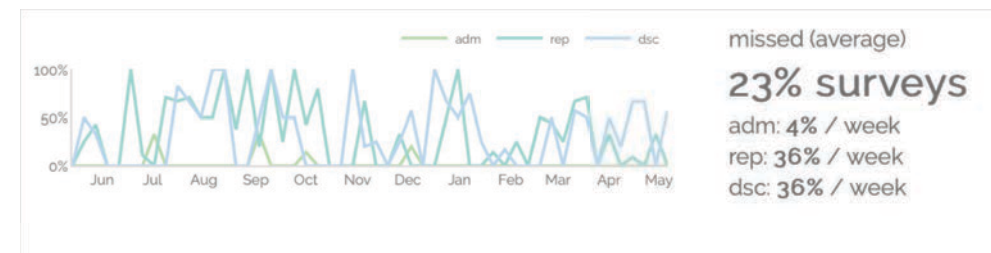
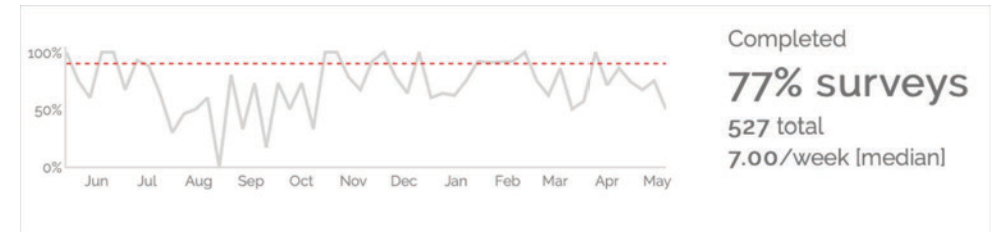
	Frequency				Context		
	NEVER	SOMETIMES	OFTEN	VERY OFTEN	ONE SETTING	FEW SETTINGS	MOST SETTINGS
<input type="button" value="I don't know"/>							
4. John shows pleasure in shared interactions <i>(e.g., enjoys doing things with people)</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="button" value="I don't know"/>							
7. John uses facial expressions that are appropriate to the situation <i>(e.g., looks sad when someone is hurt, smiles when happy)</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="button" value="I don't know"/>							
<hr/>							
	Quality				Context		
	NOT AT ALL	SUPPORT	REMINDERS	WITHOUT HELP	ONE SETTING	FEW SETTINGS	MOST SETTINGS
8. John responds to familiar things <i>(e.g., when a particular song is sung, when a familiar name is mentioned)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			



Monitoring dashboards show real-time status of data collection/utilization.

Project Reporting									
Report	Program	Status	Type	Service	Active	Total	Enrolled	Completion	Missing
	Adult Day Hospital	active	Partial Hospitalization	Adult	45	977	45/46	85%	5%
	Behavioral Health Partners	active	Outpatient	Outpatient	2095	2110	2095/6348	100%	0%
	Child & Adolescent Day Hospital	active	Partial Hospitalization	Child & Adolescent	22	966	22/22	84%	6%
	Center for Eating Disorders - Inpatient	active	Inpatient	Eating	17	189	17/30	36%	55%
	Center for Eating Disorders - IOP	active	Outpatient	Eating	7	88	7/7	75%	26%
	Center for Eating Disorders - PHP	active	Partial Hospitalization	Eating	4	88	4/25	37%	50%
	Crisis Referral Outpatient Services	active	Partial Hospitalization	Crisis	5	465	5/5	89%	3%
	Elicott City Day Hospital	active	Partial Hospitalization	Adult	14	448	14/14	82%	5%
	Jefferson Residential Treatment	deployment	Residential	RTC	0	1	0/47	1%	98%
	Berkeley and Eleanor Mann Residential Treatment Center	active	Residential	RTC	54	167	54/55	78%	45%
	Neuropsychiatry Program	active	Outpatient	Outpatient	1069	1069	1069/3299	100%	0%
	The Retreat At Sheppard Pratt	active	Inpatient	Retreat	7	193	7/7	77%	17%
	Ruxton House	deployment	Inpatient	Retreat	5	11	5/7	46%	76%
	Sullivan Day Hospital	active	Partial Hospitalization	Adult	11	188	11/17	79%	14%

Active	Total	Enrolled	Completion	Missing
45	977	45/46	85%	5%
2095	2110	2095/6348	100%	0%
22	966	22/22	84%	6%
17	189	17/30	36%	55%



Reporting tools allow visual and text based reports of PROMs

Patient Reported Outcome Measures

Summary

Rich text editor toolbar with icons for copy, paste, undo, redo, bold, italic, underline, bulleted list, numbered list, link, unlink, and zoom. Font settings: Arial, size 10.

Thursday May 09, 2019 (Follow-up 2)

- x Depression: mild 56 [≈ unchanged | trend:66 → 54 → 56]
- x Anxiety: moderate 61 [↑ increase 5 | trend:71 → 56 → 61]
- ✓ Sleep Disturbance: normal 48 [↓ decrease 4 | trend:54 → 52 → 48]
- ✓ Alcohol Use Screen: negative 0 [≈ unchanged | trend:0 → 0 → 0]
- x Emotional Support: mild 40 [≈ unchanged | trend:44 → 40 → 40]
- ✓ Life Meaning And Purpose: moderate 38 [↑ increase 5 | trend:25 → 33 → 38]
- x Life Satisfaction: moderate 33 [≈ unchanged | trend:23 → 34 → 33]

Key:

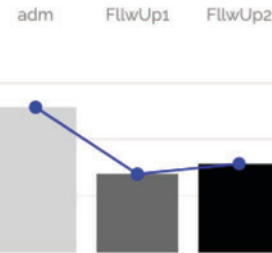
- ✓ - improving or in normal range
- x - worsening or not in normal range
- ≈ - unchanged
- ... - missed timepoint
- ↑ - increase in score
- ↓ - decrease in score
- assay scores over time

Detailed Report [click to open SPHSOutcomes.net](#)

Do the results of the PROM affect the current treatment plan? No Yes

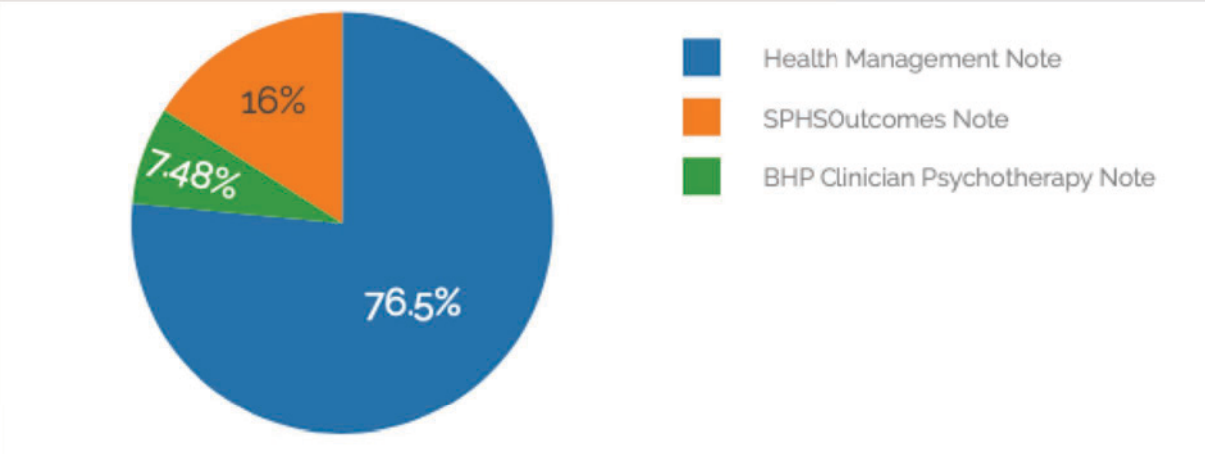
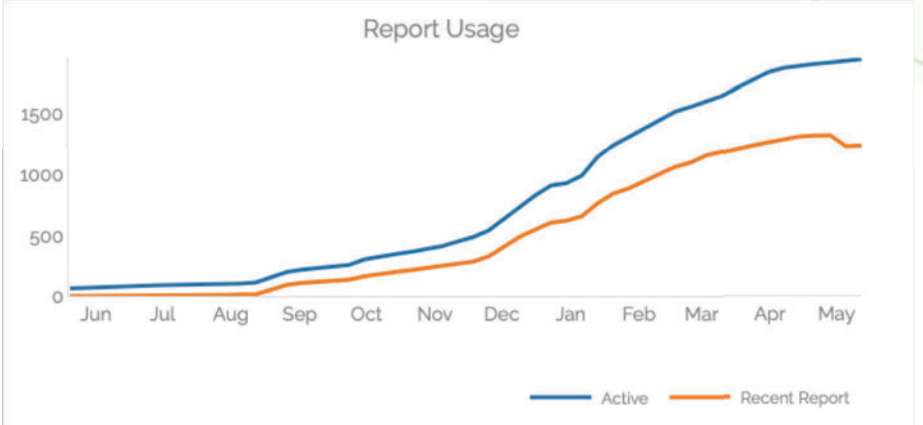
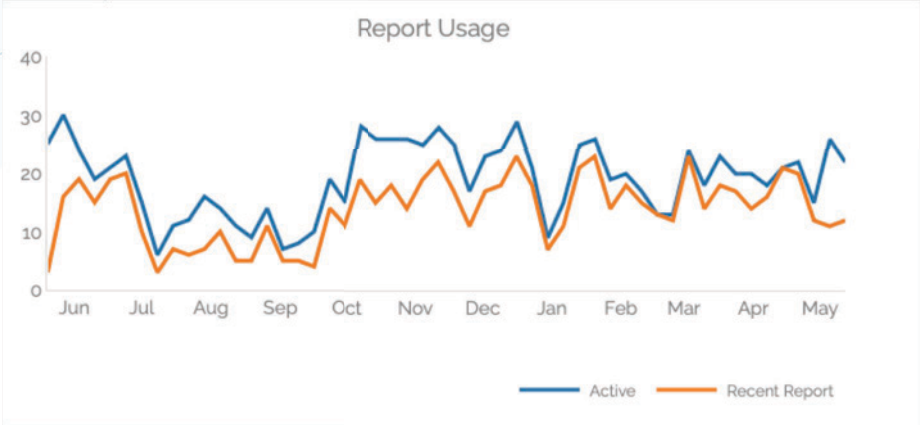
Comments

Depression (PROMIS)

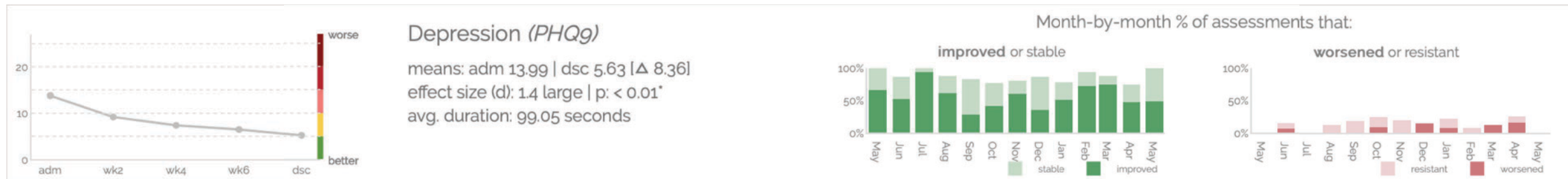
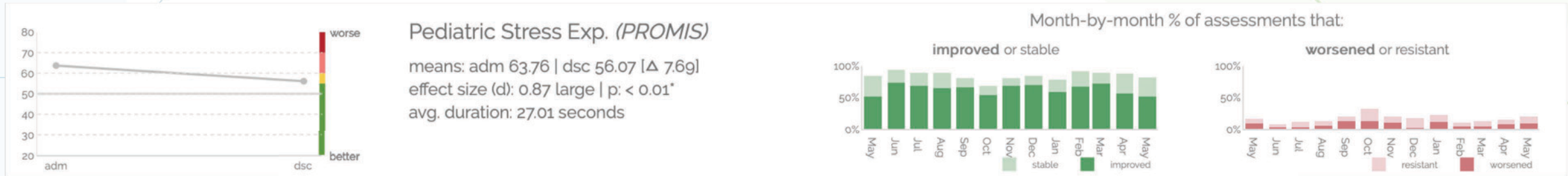


Gallery

Most of Sheppard Pratt's PROM projects collection rate is higher than 80% and utilization data shows good of adoption by providers.

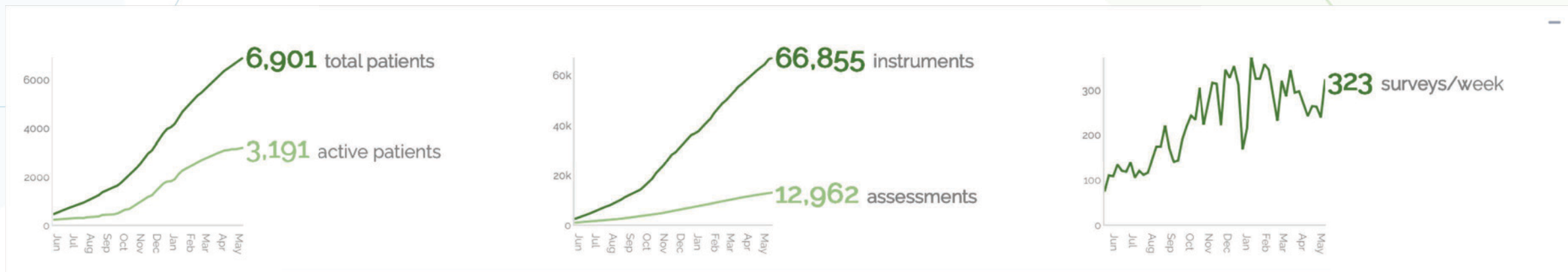


PROM data is used to show population/clinic level outcome data.



Use cases:

- *improvement projects*
- *quality monitoring*
- *predictive analytics*



Since 2018 we have collected PROM data from close to 7000 patients, over 12K assessments to date.

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Sheppard Pratt
HEALTH SYSTEM