LEVERAGING TECHNOLOGY TO IMPROVE OUTCOMES

PRESENTED BY

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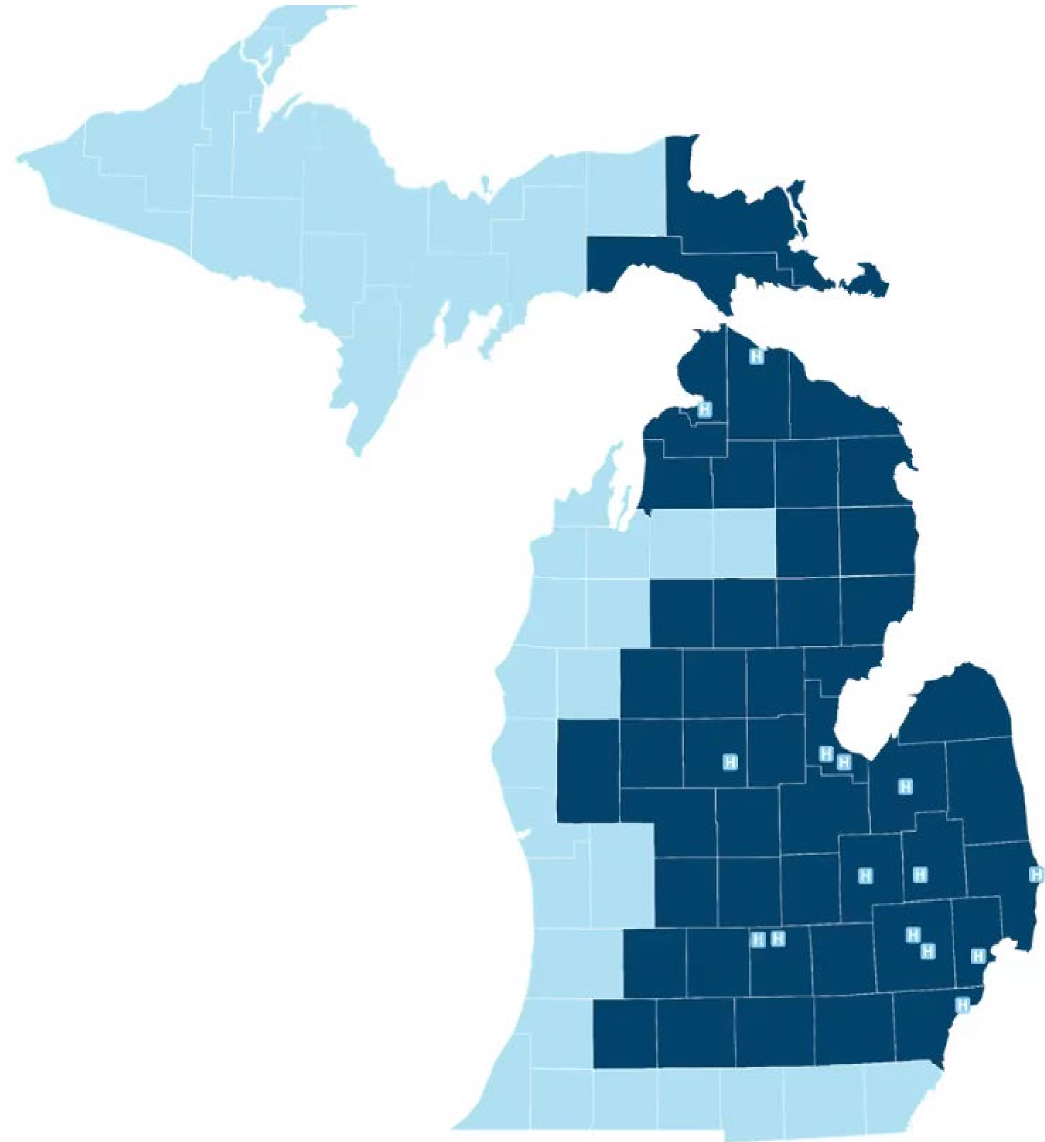
Objectives

1. The participant can identify barriers to monitoring patients in rural settings.
2. The participant can describe how AI assists in identifying patients who need assistance.
3. The participant can describe at least one way AI improves efficiency in delivering care.

MCLAREN LANDSCAPE

- 2700+ Providers
- 15 Acute Care Facilities
- 48 Counties
- >1.4M Patients
- ~260,000 “attributed”



Activate Windows

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CHALLENGES

- Reduce Readmissions
- Reduce “avoidable” ED visits
- Implement strategies to support and manage patients in the home
- Low patient engagement
- Address health inequities
- Bandwidth of Team: Approximately 150 patients per RN/LMSW
  - Identifying those who need assistance most
  - Traditional RPM program presented challenges: Cost, Wi-Fi, blue tooth connections, and patient’s comfort level with technology

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Identifying-Predicting Patients

Traditional Risk Scores Used

- Hierarchal Category Coding (HCC)
- LACE Tools
- Utilization and cost
- DRG/Diagnosis Specific

SSR-Population Health Tool

Composite score

- Diagnosis and Co-morbidities
  - (ex. Obesity, CHF, COPD)
- Demographics
  - (Age, sex, race, zip code, level of education)
- Utilization
  - (PCP identified and used, ED visits, hospitalizations)
- Lifestyle
  - (smoking, activity, diet)

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Example

Key Community Info

COMMUNITY INSIGHTS

Community Characteristics

GEOGRAPHY INCLUDED

ZIP Code
48858

Radius
10 miles

NEIGHBORHOOD STATISTICS

Block Groups	Estimated Households	Estimated Population
36	20,722	60,145

Walkability Index	Poverty Rate	Uninsured
6.17	32.83%	7.90%

REPORTED AGE

17 or Younger · 15.90%

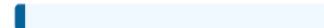
18-64 · 73.85%

65 and Older · 10.25%

REPORTED RACE OR ETHNICITY

Asian / Pacific Islander · 2.22%

Black · 3.19%



Hispanic · 4.97%

Native American · 3.28%

Other · 0.83%

White · 86.90%

COMMUNITY INSIGHTS

Key Health Characteristics

HEALTH LITERACY

Speak English 'Less than Well'
0.58%

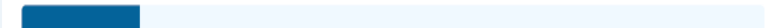
RATES OF PREVENTATIVE SCREENINGS

Cervical Screening	Colonoscopy	Mammogram
77.47%	65.72%	78.13%

APPROXIMATE NUMBER OF HEALTHCARE PROVIDERS WITHIN TEN MILES OF 48858

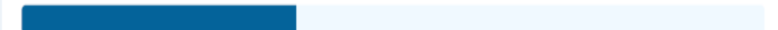
Family Medicine · 19

General Practice · 3



Internal Medicine · 17

Pediatricians · 7



Psychiatrists/Neurologists · 8

Psychologists · 13

Creating a Solution for Target Populations Identified

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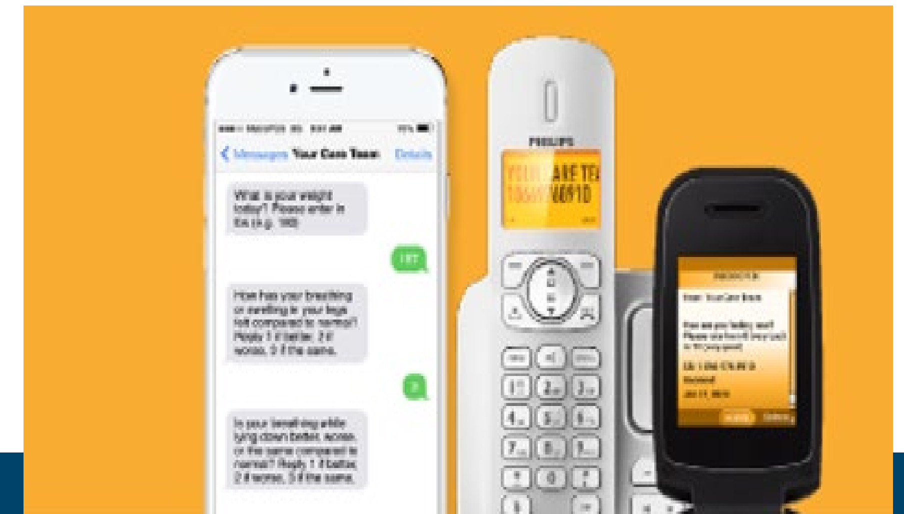
ALTERNATIVE RPM MODEL-
PATIENT REPORTED OUTCOMES “PRO”

- No Wi-Fi, email, or internet needed
- Easily accessible and convenient for patients
- Increased ability to monitor/touch more patients-without adding resources
- Disease, situation or “trigger event” specific
- Identifies a patient need before urgent
- Free for patients
- Increased Team Bandwidth



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MYCARE PROGRAMS

Example Algorithms for Target Populations:

- CHF patient is asked to rate their swelling, breathing and a weight
- COPD asked to rate breathing; cough and sputum
- ESRD asked about dialysis and barriers to next appointment
- DM asked to enter blood glucose
- High-poverty rate given SDOH Assessment and resources

Alerts

- Patient’s response can trigger an immediate alert
- Patient can request a call or assistance at anytime

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MYCARE PROGRAMS

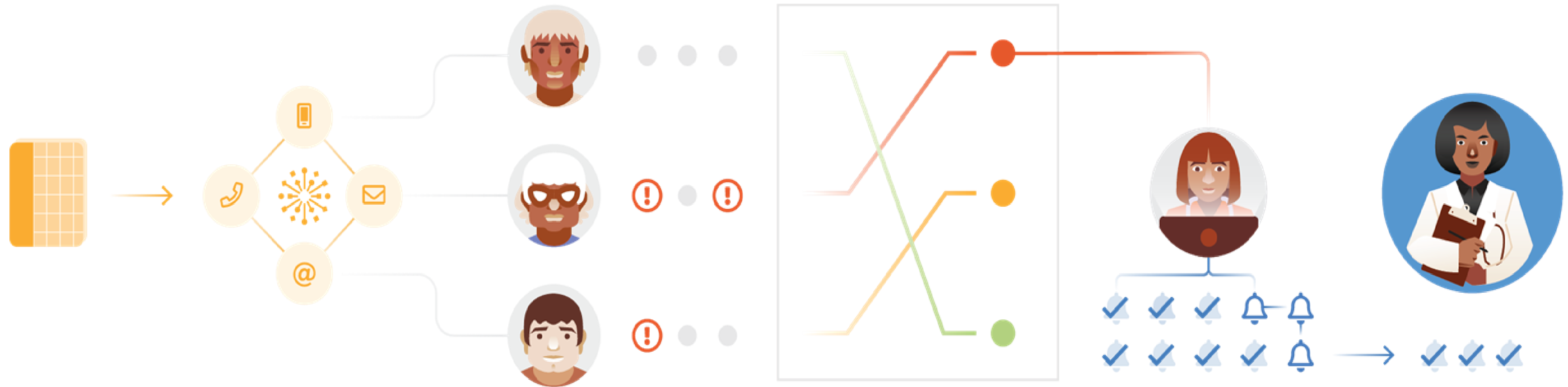
Dashboard and AI-generated categorization (red, yellow, green)

- Conditions
- Responses
- Frequency of responses (engagement)
- Alerts

Push/Blast Messaging

- SDOH example
- COPD
- Gaps in Care

MYCARE JOURNEY



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Identifies and provides list of eligible patients

Vendor
Contacts patients via test, emails, calls

Patients
Patients respond to disease/"trigger event" questions by automated email, text, or phone call

Responses flow into Platform
Categorizes and generates real-time alerts based on patient responses

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RN Care Manager monitors dashboard, evaluates, addresses alerts, or assigns to other CT members

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RN Care Manager communicates with provider, or directs to appropriate setting for care as indicated

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DASHBOARD

Overview

Export Patients in View

6384 Patients Total	2 Active Alerts	3853 Less-Engaged	2531 Engaged	7 Paused	4 Snoozed
All Patients	1	1499 · 2354	H 31 · M 252 · L 2248	7	11 · 11

Patients View Newly Enrolled

Filter By | Most Alert Count

High-Risk Patients (31)

Send Push Message | Collapse

H ████ DOB 1951-07-21 MRN 4M21Q80CJ28 — Snooze — Resolve

H Diabetes — Min BS below red limit

H ████ DOB 1943-03-23 MRN 300000212459 — Snooze — 82 Days Ago

H Diabetes — Min BS below red limit

Alerts

Newest First

Today 9:01am EDT #534394 — COPD

████ Patient Lentine has reported breathing worse.

Today 8:31am EDT #534379 — Heart Failure

████ Patient Joyce reported swelling more

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OUTCOMES

Patient Participation:

- 6500 Active (>12,000 unique in last 12 months)
- 26% of above are in a rural setting
- >12,000 alerts addressed in last 12 months
- 74% (DM)- 86% (Post ED and hospitalization) engagement rate

Most Common Alerts:

- ED Patient has question after discharge
- COPD-breathing worse
- CHF Breathing and swelling
- DM patient glucose out of parameter

OUTCOMES CONT'D

Clinical Outcomes:

- 7.8-point drop in systolic BP from baseline
- 1.6-point drop in HgbA1c for patients starting >8
- Readmission rate reduction overall 3.2%

Staffing Efficiencies:

- RN's (3)-previously 450 patients now 6500=1300% increase
- Eyes on those likely to have an issue; focused work on those who need assistance

Projected Cost avoidance:

- 5.02M Chronic Illnesses
- 143 ED Visits

EXPANSION

SDOH Initial Assessments

- Rural
- Aged-Dual

Analytic tools to predict patients

- Proprietary Risk score-60+ elements used to predict
- Risk Stratification

Post-Discharge-system wide

- ED
- Inpatient

Gaps in Care

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PATIENT FEEDBACK

I appreciate the follow-up. When I had a question, the nurse called me within the hour #266204

"You know what I like about this kind of text messaging is that **It's simple, direct, & the response to my questions or follow up by the caregiver is is almost immediate**. Thanks!"

06/15 - Patient #298162

I will not change a thing. It just reminds me that I have to take care of myself more often by checking my sugar and my pressure everyday thank you so much for the reminder. It's like having a doctor on my phone.

02/11 - Patient #263915

"It's much easier to text then talk. It gives me time to go over the events being asked about."

06/09 - Patient #294925

"Just having someone review, my blood pressure makes me feel safer."

07/20 - Patient #302625

Care Satisfaction · You are getting the best possible care from McLaren.

Average 7.11 **N** 1,376

Health Literacy · Messages from McLaren have helped me understand my condition better.

Average 6.36 **N** 2,868

IN CONCLUSION

SSR-Composite Risk

- Based on research
- Plan to evaluate effectiveness

Alternative RPM Model

- Proved to be an effective tool in the rural health setting
- Gives patients easy access to healthcare team and resources without having to travel or in areas where access is limited (delivers care while in the home)
- Escalates only urgent needs reducing call burden to the practice
- Significantly improved staffing efficiencies
- Promotes lowest cost setting of care through early identification-”warning signs”

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