AMGA’s Together 2 Goal® Campaign: A Diabetes Deep Dive

Jerry Penso, M.D., M.B.A.
President & CEO, AMGA
AGENDA

IMPROVING CARE NATIONWIDE

MEDICAL GROUP PANEL

IMPROVING A1C CONTROL

HealthPartners®

Intermountain Medical Group
Healing for life®

Ochsner Health System

Kaiser Permanente®

UC Berkeley School of Public Health

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Presenters and moderator have no relevant financial or nonfinancial relationships to disclose
IMPROVING CARE NATIONWIDE: ABOUT TOGETHER 2 GOAL®

John W. Kennedy, M.D.
Chief Medical Officer, AMGA; President, AMGA Foundation
ABOUT AMGA

AMGA

Advancing High Performance Health
ABOUT TOGETHER 2 GOAL®

Together2Goal

AMGA Foundation
National Diabetes Campaign

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OUR REACH

- **150 groups in 35 states**
- **61,000 FTE physicians**
- **2.0 million patients with Type 2 diabetes**
CAMPaign Planks

**Empower Patients**
- Build an Accountable Diabetes Team
- Integrate Emotional & Behavioral Support
- Refer to Diabetes Self-Management Education & Support Programs

**Improve Care Delivery**
- Conduct Practice-Based Screening
- Adopt Treatment Algorithm
- Measure HbA1c Every 3-6 Months
- Assess & Address Risk of Cardiovascular Disease
- Contact Patients Not at Goal & with Therapy Change within 30 Days

**Leverage Information Technology**
- Use a Patient Registry
- Embed Point-of-Care Tools
- Publish Transparent Internal Reports
CAMPAIGN TOOLKIT
Improve care for 1 million people with Type 2 diabetes by 2019
# IMPROVEMENT THROUGH 2017 Q1

## Patients with Improved Care

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 18–75</td>
<td>394,000</td>
</tr>
<tr>
<td>Age 18–89</td>
<td>477,000</td>
</tr>
</tbody>
</table>
MEDICAL GROUP PANEL

Moderator: Hector P. Rodriguez, Ph.D., M.P.H.
Professor, Health Policy and Management; Co-Director, Center for Health Organizational and Innovation Research (CHOIR); UCB SPH, Right Care Initiative Technical Expert Group
SESSION OBJECTIVES

1. Identify specific tactics that health care delivery systems can implement to improve a bundle of outcome measures in diabetes
2. Learn novel ways to engage the entire care team and patients in improving health
3. Discover the advantages of joining a national peer-led campaign to improve diabetes care
MEDICAL GROUP PANELISTS

STANDARDIZING & CUSTOMIZING CARE

Beth Averbeck, M.D.
Senior Medical Director, Primary Care

INTEGRATING THE PHARMACIST

Christopher Jones, M.D.
Internist and Chair, Diabetes Clinical Programs

INCORPORATING TECH

Phil Oravetz, M.D., M.P.H., M.B.A., Medical Director, Accountable Care
Consumer-governed, non-profit

Integrated health care delivery and financing
- Clinics and hospitals
- Health plan

Twin Cities & surrounding communities (MN & Western WI)
Strategies for Diabetes

• Care Team support
• Point of care decision support
• Pharmacists and diabetes educators
• ECHO model
• Addressing disparities
Care Design

Work to standardize clinic workflows

“The right person doing the right thing at the right time with the right patient experience.”

“Standardize to the science, customize with the patient.”
Care Model Process

Before The Visit
- Visit Scheduling

Pre-visit Planning
- Reception: Contact patients to schedule
- CMA/LPN: Registry, LPN standing orders for HbA1c, LDL, Preventive services, Collaborative documentation & template for diabetes
- Clinician: Leader of care team, Diagnosis and treatment, Engaging patients in their care, Directing members of care team, Care plans
- RN’s: Care coordination, Health coaching, Support for newly diagnosed patients (same day), Nurse visits, Medication titration

During the Visit
- Check-in
- Visit

After the Visit
- Follow-up

Between Visits
- Between Visits
Diabetes “Neighborhood” Care Team

*Diabetes Nurse Specialists and Dietitian Nutritionists can both be Certified Diabetes Educators

System support: Lab standing orders & EHR decision support

Registered Dietitian Nutritionist
- Balancing eating and activity with medication and monitoring

Diabetes Nurse Specialist
- Matching meter to coverage
- Medication adjustment
- Help with registries
- Support behavior change

Pharmacist
- Lipids
- Blood pressure
- Poly pharmacy
- Medication coverage and cost

Clinician

Patient

Diabetes “Neighborhood” Care Team

*Diabetes Nurse Specialists and Dietitian Nutritionists can both be Certified Diabetes Educators
EHR Decision Support
“CV Wizard”

- Identifies ten year patient-specific cardiovascular risk
- Prioritizes risk factors based on potential benefits to the individual
- Helps patients and clinicians make more informed and better decisions
- Incorporates new evidence and guidelines into practice quickly
- Improves outcomes for people with diabetes
- Cost-effectiveness has been demonstrated

“CV Wizard” – Workflow

- Assesses total & reversible ASCVD risk
- Runs Prioritization Algorithms
- Runs Treatment Algorithms
- Runs Safety Algorithms

Displays Patient and Provider Interfaces

Print

Provider Interface on Door

Patient Interface to Patient

Provider-Patient Discussion

Appropriate CV risk factor treatment, including medication
Referrals to Lifestyle Modification and Tobacco Cessation Programs
# Clinician View

## CV Wizard

<table>
<thead>
<tr>
<th>Name: EPICTEST, RESEARCH</th>
<th>Age: 59</th>
<th>Gender: M</th>
<th>ASCVD 10 Year Risk: 24.5%</th>
</tr>
</thead>
</table>

### Relevant problems: Diabetes

#### Lipids

<table>
<thead>
<tr>
<th>Goal: Consider statin initiation.</th>
<th>Priority: 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labs:</td>
<td></td>
</tr>
<tr>
<td>LDL (mg/dl)</td>
<td>94</td>
</tr>
<tr>
<td>HDL (mg/dl)</td>
<td>46</td>
</tr>
<tr>
<td>Recommendations to consider:</td>
<td></td>
</tr>
<tr>
<td>• If patient is an appropriate candidate, high intensity statin therapy is recommended the ACC/AHA guideline for patients with diabetes and 10-year ASCVD risk &gt; 7.5%.</td>
<td></td>
</tr>
</tbody>
</table>

#### Blood Pressure

<table>
<thead>
<tr>
<th>Goal: BP &lt; 140/90</th>
<th>Priority: 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labs:</td>
<td></td>
</tr>
<tr>
<td>BP (mm Hg)</td>
<td>143/93</td>
</tr>
<tr>
<td>Last BP (mm Hg)</td>
<td>10/29/14</td>
</tr>
<tr>
<td>Recommendations to consider:</td>
<td></td>
</tr>
<tr>
<td>• Patient meets hypertension criteria but hypertension is not on the problem list.</td>
<td></td>
</tr>
<tr>
<td>• Consider starting a thiazide diuretic.</td>
<td></td>
</tr>
<tr>
<td>• Consider starting an ACE inhibitor or ARB (e.g., lisinopril 10 mg or losartan 50 mg per day).</td>
<td></td>
</tr>
<tr>
<td>• Consider home BP monitoring.</td>
<td></td>
</tr>
</tbody>
</table>

#### Glucose/A1c

<table>
<thead>
<tr>
<th>Goal: A1C &lt;= 6.9</th>
<th>Priority: 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labs:</td>
<td></td>
</tr>
<tr>
<td>A1c (%)</td>
<td>7.4</td>
</tr>
<tr>
<td>Recommendations to consider:</td>
<td></td>
</tr>
<tr>
<td>• Insulin Glargine</td>
<td></td>
</tr>
</tbody>
</table>

#### Other Considerations:

- Urinary albumin excretion test (e.g., UMAKR) may be due.
- Diabetes educator and/or dietician support is suggested.

#### BMI: 37.31

<table>
<thead>
<tr>
<th>Priority: 4</th>
</tr>
</thead>
</table>

**(based on 3 unit drop in BMI)**

- Discuss advantages of reducing weight by 10-20 lbs. Potential actions are listed on patient interface.
- Based on BMI and/or other comorbid conditions, consider discussing bariatric surgery.

#### Smoking: YES

<table>
<thead>
<tr>
<th>Priority: 1</th>
</tr>
</thead>
</table>

- Tobacco use is identified. Assess readiness and consider varenicline (Chantix), bupropion (Zyban), or nicotine patch, gum, lozenge, or inhaler. Type “hp connect” in Epic orders for smoking cessation counseling referral. Additional options listed on patient interface.

#### Aspirin or Blood Thinner Use: NO

<table>
<thead>
<tr>
<th>Priority: 3</th>
</tr>
</thead>
</table>

- Clinical indication for ASA: Yes
- Benefit outweighs risk based on age, gender and heart disease risk.

### Disclaimer:
The CV Wizard suggestions are based on electronically available data and are not intended to be a substitute for clinical judgment. Alternative actions to those that Wizard suggest may be indicated. Exercise independent clinical judgment; review allergies, and follow product labelling instructions before choosing Wizard prescribing suggestions. Copyright 2014 HealthPartners, all rights reserved. In the absence of Lipid values, risk is based on the BMI Framingham equation.
## Blood Pressure

**CV Risk Reduction:** 2%

<table>
<thead>
<tr>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

**Goal:** BP < 140/90

**Labs:**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Value</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP (mm Hg)</td>
<td>143/93</td>
<td>10/29/14</td>
</tr>
<tr>
<td>Last BP (mm Hg)</td>
<td>143/93</td>
<td>10/29/14</td>
</tr>
</tbody>
</table>

**Recommendations to consider:**

- Patient meets hypertension criteria but hypertension is not on the problem list.
- Consider starting a thiazide diuretic.
- Consider starting an ACE inhibitor or ARB (e.g. lisinopril 10 mg or losartan 50 mg per day).
- Consider home BP monitoring.
Can you reduce danger of heart attack and stroke?

Yes, you can if you want to reduce your chance of a stroke or heart attack, talk to your doctor about what you can do about the things with the most signs. The things with the are ok.

<table>
<thead>
<tr>
<th>Cholesterol</th>
<th>Blood Pressure</th>
<th>Blood Sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Goal: BP &lt; 140/90</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Your BP: (138/84)</td>
<td></td>
</tr>
<tr>
<td>![Exclamation mark] ![Exclamation mark]</td>
<td>![Heart]</td>
<td>![Heart]</td>
</tr>
</tbody>
</table>

**Recommendations:**
Talk to your doctor about your statin dose.

<table>
<thead>
<tr>
<th>Weight</th>
<th>Smoking</th>
<th>Aspirin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your Weight: 250</td>
<td>Non Smoker</td>
<td>Not on Aspirin</td>
</tr>
<tr>
<td>![Exclamation mark]</td>
<td>![Heart]</td>
<td>![Exclamation mark]</td>
</tr>
</tbody>
</table>

**Recommendations:**
For support with weight management contact: HP Nutrition Services (952-967-5120), or visit www.healthpartners.com/public/health, or call your clinic.

**Recommendations:**
Aspirin allergy or intolerance has been found. Check with your provider before considering aspirin.

Talk to your doctor about anything with one or more symbols. Take notes here about what you can do to improve your heart health:

CV Wizard Impact

The Wizard has been implemented in several large care systems.

130 clinics and 1.5 million patients covered in four states.
## Results of Provider Satisfaction Survey

<table>
<thead>
<tr>
<th>Provider Survey Results</th>
<th>User</th>
<th>Non-user</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used to calculate CV risk while seeing patients</td>
<td>73%</td>
<td>28%</td>
<td>0.006</td>
</tr>
<tr>
<td>Well prepared to discuss CV risk reduction priorities with patients</td>
<td>98%</td>
<td>78%</td>
<td>0.03</td>
</tr>
<tr>
<td>Able to provide accurate advice on aspirin for primary prevention</td>
<td>75%</td>
<td>48%</td>
<td>0.02</td>
</tr>
<tr>
<td>Often discuss CV risk reduction with patient</td>
<td>60%</td>
<td>30%</td>
<td>0.06</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wizard User Comments (N=47)</th>
<th>% Agree/Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved CV risk factor control</td>
<td>98%</td>
</tr>
<tr>
<td>Saved time when talking to patients about CV risk reduction</td>
<td>93%</td>
</tr>
<tr>
<td>Efficiently elicited patient treatment preferences</td>
<td>90%</td>
</tr>
<tr>
<td>Useful for shared decision-making</td>
<td>95%</td>
</tr>
<tr>
<td>Influenced treatment recommendations</td>
<td>89%</td>
</tr>
<tr>
<td>Helped initiate CV risk discussions</td>
<td>94%</td>
</tr>
<tr>
<td>My patients liked the Wizard</td>
<td>85%</td>
</tr>
</tbody>
</table>

*Wizard is used at more than 70% of visits with targeted patients*
Pharmacist Support: Home Blood Pressure Telemonitoring

- Physician usual care vs. pharmacist provided care with a telemonitoring component.

<table>
<thead>
<tr>
<th></th>
<th>Intervention BP Control N=228</th>
<th>Usual Care BP Control N=222</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 months</td>
<td>71.8%</td>
<td>45.2%</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>12 months</td>
<td>71.2%</td>
<td>52.8%</td>
<td>.005</td>
</tr>
<tr>
<td>18 months</td>
<td>71.8%</td>
<td>57.1%</td>
<td>.003</td>
</tr>
</tbody>
</table>

## Pharmacist Support
### MTM Clinical Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Baseline (no MTM) N=370</th>
<th>5 years (no MTM)</th>
<th>Baseline (MTM) N=296</th>
<th>5 years (MTM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDL controlled</td>
<td>70.2%</td>
<td>69.6%</td>
<td>73.9%</td>
<td>85%</td>
</tr>
<tr>
<td>A1C controlled</td>
<td>52.9%</td>
<td>68.1%</td>
<td>48%</td>
<td>78.3%</td>
</tr>
<tr>
<td>BP controlled</td>
<td>79.6%</td>
<td>77.8%</td>
<td>84.6%</td>
<td>92.2%</td>
</tr>
<tr>
<td>Aspirin Use</td>
<td>85.2%</td>
<td>100%</td>
<td>90.9%</td>
<td>100%</td>
</tr>
<tr>
<td>Not smoking</td>
<td>86.2%</td>
<td>89.5%</td>
<td>92.6%</td>
<td>92.2%</td>
</tr>
<tr>
<td>Optimal diabetes control</td>
<td>16.5%</td>
<td>39.9%</td>
<td>16.2%</td>
<td>61.1%</td>
</tr>
</tbody>
</table>
MTM Diabetes Pilot Cost Savings

97 fewer hospital admissions = $809,000 savings!

199 fewer Emergency Room visits = $157,500 savings!

Projected Cost Savings of $967,000
Endocrinology Support

- Share knowledge and best practices through the use of tele-video
- Discuss difficult diabetes cases with experts and other providers
- Build relationships with colleagues
**Measure**: Optimal Diabetes Care - % of patients ages 18-75 with diabetes who have the following:

- Statin use or LDL < 70 (patients > 40 years)
- A1c with a value less than 8.0
- Blood pressure less than 140/90
- Documented non-tobacco user
- Aspirin use (vascular disease)

**2017**

Statewide Average: **44.7%**  
HealthPartners: **49.7%**

*NQF Endorsed*
Addressing Disparities
Standardization Improves Care

**Optimal Diabetes Care**

*Measure:* % of HPMG patients with diabetes have statin on current medication list (or LDL <70 for patients >40), have had an A1c in the last 12 months with a value <8.0, last recorded blood pressure <140 and <90, documented non-tobacco user and documented regular aspirin user.
Optimal Diabetes by Race
Minnesota Community Measurement

**FIGURE 28: STATEWIDE RATES FOR OPTIMAL DIABETES CARE BY RACE**

- HealthPartners Dec 2017:
  - % met white: **50.70%**
  - % met patients of color: **44.83%**

<table>
<thead>
<tr>
<th>Race</th>
<th>Optimal Care Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian (N=9,966)</td>
<td>48%</td>
</tr>
<tr>
<td>White (N=218,042)</td>
<td>47%</td>
</tr>
<tr>
<td>Some Other Race (N=1,367)</td>
<td>44%</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander (N=370)</td>
<td>44%</td>
</tr>
<tr>
<td>Multi-Racial (N=1,298)</td>
<td>38%</td>
</tr>
<tr>
<td>Black or African American (N=20,424)</td>
<td>33%</td>
</tr>
<tr>
<td>Unknown (N=257)</td>
<td>28%</td>
</tr>
<tr>
<td>American Indian or Alaskan Native (N=4,312)</td>
<td>24%</td>
</tr>
</tbody>
</table>

Statewide Average = **45%**
Thank You!
INTEGRATING THE PHARMACIST

Christopher Jones, M.D.
Internist and Chair, Diabetes Clinical Programs
Integrating Pharmacists into Primary Care Clinics

Right Care Summit

AMGA – Advancing High Performance Health

Christopher W Jones, MD

Intermountain Medical Group
Healing for life®
Integration of Pharmacists into Primary Care Clinic “Collaborative Pharmacist Support Services (CPSS) Program”

Pilot studies:
• PGY-2 Pharmacy residents
• Focus on single clinical goal (HTN) in one clinic
• Evaluate data

With success we moved to other clinical areas:
• Medication Adherence in Taylorsville Clinic
• Transition of Care in Salt Lake Clinic
Medication Adherence Focus

Collaboration
- Team Based - Entire PPC group engaged
- Care manager supplied list of patients for pharmacist to contact
- Adherence assessed with every patient seen by the pharmacist

Patient Contact
- Pharmacist contacted patient by telephone
- Follow-up warranted for about 50% of patients

Conversation
- Conversation started by asking patient, “how are things going with your medications?”
- Patients very open about medication non-adherence
- Assessed reasons for non-adherence
- Worked with patient to create action plan to address non-adherence
Medication Adherence Impact

**Hypertension**
- 92.8%
- 26% increase from baseline

**Cholesterol**
- 91.9%
- 22% increase from baseline

**Diabetes**
- 88.9%
- 31% increase from baseline
Transition of Care Focus

Care Guide
- Discharge list
- Obtains records
- Appointment scheduling

PharmD
- Medication reconciliation
- Patient education
- Recommendations

NP/MD
- Follow-up visit
- Resolve med issues
Salt Lake Clinic Transitions of Care (TCM) – 2016 Highlights

<table>
<thead>
<tr>
<th>TCM Med Recs Performed</th>
<th>706</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes made to Rx list in EMR</td>
<td>7,396</td>
</tr>
<tr>
<td>Recommended addition or deletion of therapy</td>
<td>1,241</td>
</tr>
<tr>
<td>Recommended optimization of dosing</td>
<td>54</td>
</tr>
<tr>
<td>Clinically significant drug-drug interaction identified</td>
<td>65</td>
</tr>
<tr>
<td>Real or potential ADE identified</td>
<td>27</td>
</tr>
<tr>
<td>Patient or caregiver redirected</td>
<td>84</td>
</tr>
<tr>
<td>Medication access issues identified</td>
<td>164</td>
</tr>
<tr>
<td>TCM charges ($34,224)</td>
<td>147</td>
</tr>
</tbody>
</table>
Expansion of the Program

- **Expansion: Pharmacist’s work**
  - PharmD use lists to find patients
  - Education for staff

- **Expansion: Geographic**
  - 7 PharmD full-time in PCP Clinics
  - 2 PharmD part-time in PCP Clinics
  - 15 clinics
  - Covering ~100 practitioners
  - Covering ~150,000 lives
  - Adding 4 more PharmD in 2018

- **Expansion: the Pharmacist’s scope**
  - Medication Adherence
  - Transition of Care
  - Diabetes A1c goal
  - Hypertension
  - Hyperlipidemia
  - Pain/Opioid management
  - High Risk Meds
  - Medication Side Effects
  - Polypharmacy/Drug Interactions
  - Medication Access
Collaborative Pharmacist Support Services Program

A Few Details

• Pharmacist must have one or two year residency training in ambulatory care with certification to perform clinical care
• Pharmacist has physical space in the clinics
  • Time sharing
  • PSR and MA support
• Referrals come from providers and care managers
• Face-to-face visits initially and intermittently
• Phone contact increased opportunity to affect care
• Follow Collaborative Practice Agreement
  • A contract that allows pharmacist to start, stop, adjust medications independently according to an established protocol
  • At Intermountain this is the Care Process Model document
Collaborative Pharmacist Support Services Program

Disease Management in Collaboration With Your Pharmacist
DYSLIPIDEMIA, DIABETES, AND HYPERTENSION

Improving clinical outcomes and increasing patient satisfaction

The Collaborative Partnership
Providers are increasingly accountable for specific clinical outcomes and are often asked to do more with less. Medication monitoring is important for achieving clinical outcomes, but this aspect of care can be time-consuming and complex, especially when patients have multiple chronic conditions. Partnering with your pharmacist can help you optimize care for patients with dyslipidemia, diabetes, and/or hypertension. For patients enrolled in the program, the pharmacist partners with the provider to select, start, and monitor medications to treat these conditions and improve outcomes.

- The pharmacist provides a range of disease management services for patients enrolled in the program:
  - Reviewing the patient record, including medical history, laboratory tests, and current medications, and making sure the medical plan is up to date.
  - Developing and executing a treatment plan and managing medications for this plan, including drug selection, dose titration, monitoring, and adjustments as needed.
  - Educating the patient on risk factors, therapeutic lifestyle changes when appropriate, medication compliance, and managing side effects.
  - Ongoing monitoring, including lab tests needed (the pharmacy team consults with care managers or clinical staff to order these tests).
  - Documenting and communicating the treatment plan with the patient using the HELP2 system.
  - Using the provider summary report as a baseline, with outcomes for patients participating in the program.

- The program supports your existing relationship with your patients, which remains intact, and the program adds ongoing management for established patients as well as newly diagnosed patients. All patients continue to have ongoing appointments with their referring providers.

- Getting started with the program is easy. To learn more, call 888-442-3140 or email IntermountainPharmacies@email.com.
CPSS Research Study

Purpose: To evaluate the effectiveness of the CPSS deployed within 7 clinics at Intermountain Healthcare by measuring the achievement of clinical targets for patients with diabetes and high blood pressure:

• Achieving established goals
  o BP <140/90
  o A1c <8.0

• Time to reach the goal

• Number of encounters with the team

Results - Attaining Clinical Targets

Measurement of "Effectiveness": Pharmacy - Personalized Primary Care Integration

- Attained both HbA1c and BP targets*
  - OR = 1.87, 95% CI (1.41-2.50)
- Attained BP <140/90 within 7 months*
  - OR = 1.93, 95% CI (1.41-2.65)
- Attained HbA1c <8% within 12 months*
  - OR = 1.57, 95% CI (1.06-2.34)

- Odds of attaining target:
  - Less
  - More

95% Confidence Intervals  ◇ Odds Ratio

- p < .001
- p < .001
- p = .026
On average, patients were seen 4-5 times by pharmacist before “graduation”

Significantly more visits with “care team” overall
- PCP
- Care Manager
- Specialty care

8.0 vs. 5.1 visits per pat/yr; p<.001
Health System Concepts that Facilitate Pharmacist Integration

- Accountable Care Organization
- PCP clinics which are Medical Homes
- Care Process Model of whatever name
- Fee for value focus
- Integrated EMR
- Culture of Quality Improvement
Summary

Well trained pharmacists integrated into the work flow of primary care medical home clinics serve as an effective way to improve patient outcomes.
INCORPORATING TECH

Phil Oravetz, M.D., M.P.H., M.B.A.
Medical Director, Accountable Care
Ochsner Health System

Our Mission is to Serve, Heal, Lead, Educate, and Innovate

<table>
<thead>
<tr>
<th>OCHSNER BY THE NUMBERS</th>
<th>EDUCATING TOMORROW’S HEALTHCARE PROVIDERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 Hospitals (Owned &amp; Managed)</td>
<td>375 Residents in</td>
</tr>
<tr>
<td>11 OHN or OHS Affiliated Hospitals</td>
<td>27 Programs</td>
</tr>
<tr>
<td>60+ Health Centers</td>
<td>1,800,000 Clinic Visits In 2016</td>
</tr>
<tr>
<td>700,000 Patients Served in 2017</td>
<td>23,500 Telemed Consults</td>
</tr>
<tr>
<td>1,000+ Active Clinical Trials</td>
<td>1,200+ Employed Physicians</td>
</tr>
<tr>
<td>17,000+ Employees</td>
<td>90 Medical Specialties &amp; Subspecialties</td>
</tr>
<tr>
<td>More Than 10,000 Regional Referrals</td>
<td></td>
</tr>
</tbody>
</table>

Our Vision

Ochsner will be a global medical and academic leader who will save and change lives. We will shape the future of healthcare through our integrated health system, fueled by the passion and strength of our diversified team of physicians and employees.
Ochsner’s O Bar

Serving up technology that helps keep patients engaged and out of the doctor’s office
Among the tens of thousands of health apps and numerous devices, how to do decide what’s effective?
• **Purpose of the O Bar?**
  • With over 100,000 health care related apps on the market today, we are clearing the noise for our patients and direct them to the best apps.

• **What happens during a patient visit to O Bar?**
  • Patients drop by before or after primary care appointments, where they are can speak to non-clinical, tech-savvy IT specialists, who are members of the primary care team, to have questions answered, walk through app tutorials, and are assisted with app downloads and technology integration.

• **Early Results?**
  • In the first six months, patients downloaded over 3,000 apps

• **What’s happening now?**
  • Technology based battle against chronic disease: Hypertensive Digital Medicine Program enables patients to use wireless cuffs at home and blood pressure readings are streamed directly to the EMR. Congestive heart failure patients’ weight can now be monitored remotely by medical professionals via a wireless bathroom scale via our Heart Failure Digital Medicine Program. Diabetes monitoring, COPD, specialized inhalers for asthma and vision monitoring for failing eyesight programs are in development.
A closer look at the O Bar: Semi-retail space

• Bluetooth blood glucose monitors
• Wireless blood pressure monitors
• Wireless scales
• Activity trackers such as Fitbit and Jawbone
• Hundreds of physician approved health apps
Ochsner Health System

O Bar Prescription

Ochsner Center for Primary Care and Wellness
1401 Jefferson Highway, New Orleans, LA 70121
ochsner.org/obar

Patient
Visit the O Bar to get your apps & devices today!

Rx
Your Prescription for good health.

Rx APPS
○ Nutrition
○ Fitness
○ Women’s
○ Oncology
○ Diabetes
○ Medication
○ Smoking
○ General Health

DEVICES
○ Activity Monitor
○ Blood Glucose Monitor with Bluetooth
○ Wireless Scale
○ Wireless Blood Pressure Monitor

Physician Signature ____________________________

"Tell me and I forget. Teach me and I may remember. Involve me and I learn."
-BEN FRANKLIN
Ochsner Diabetes Digital Medicine Program
Traditional Healthcare Model

- PCP in Brick and Mortar Setting
- Manage Patient through PCP-directed Team (Medical Home Model)
- Refer to Specialists

Digital Healthcare Model

- Frequent data points
  - “continuous measurement”
  - patient activated
  - faster cycle times
  - quicker course corrections
- Analytics engine
  - better or worse?
  - need intervention?
  - need encouragement?
  - need advice?
- Integrated Practice Unit
  - tools tailored for each patient
  - behavior, communication, education, engagement

Social Network
- strengthen/develop
- activate educate

Ochsner Health System
Treatment Recommendations in Diabetes Care

‣ Provide **patient-centered care** that meets the specific goals for patients and addresses barriers and challenges that are unique to each patient

‣ Use **medications with complementary mechanisms of action** that improve glycemic control by targeting different pathophysiologic defects of diabetes

‣ Use **collaborative teams** to manage patients (physicians, pharmacists, APPs, dietitians, CDEs and social workers)

‣ **Empower patients** as decision makers in their own care; diabetes depends more on patient behavior than on clinical interventions
## Diabetes Facts

### Consequences
- Stroke
- Blindness
- Heart attack
- Kidney failure
- Amputation

### Treatment Goals
- Control blood sugar (A1C goal personalized)
- Avoid hypoglycemia
- Lifestyle (diet, exercise, adherence)
- Education (patient activation, improve health literacy)
- Personalized treatment regimen (maximize freedom from complications)
- Surveillance of key organ systems for signs of impairment (health maintenance)

Diabetes Digital Medicine: Strategy

- PharmD trained in diabetes management, following the 2017 ADA Guidelines (personalized treatment regimen)
- Health Coach trained in motivational interviewing, lifestyle change and diabetes education
- All blood glucoses electronically sent to digital medicine team realtime

**Goals**

- Eliminate hypoglycemia
- Achieve individualized A1C goal
- Complete all Health Maintenance goals
Diabetes Enrollment

Eligibility

• Type 2 diabetes
• Payor: Humana Gold, MSSP, employees, BCBS Blue Connect, BCBS QBPC
• Must posses a smartphone (Android, iOS)
• Insulin and/or oral medications, (only basal insulin, not prandial)

Note: APP’s must enroll under a physician provider to accommodate the collaborative practice agreement.
Diabetes Enrollment

Start enrollment

- Active MyChart
- Introduction EULA
- Intake Questionnaires
- Device Purchase
- Initial glucose entered

- Type II Diabetic
- MD Order
- Not on MyChart
- Enroll MyChart
- Enrolled
- Facilitator
- MD Order
Patient Characterization

- Onboarding
- Dietary analysis
- Medication adherence
- Living circumstances
- Medication affordability
- Social network
- Caregiver support
- Sleep apnea screening
- Depression
- Patient activation measure
- Physical activity index
- Health literacy
- Transportation issues
- Access to care
- Diabetes distress
• Real-time analytics are performed and stratify patients into risk groups
Customized Educational Videos

- Understanding Type 2 Diabetes
- Treatment options for Type 2 Diabetes
- Checking your blood sugar level
- Treating low blood sugar
- Managing Diabetes on sick days
- Using an insulin pen
- Using an insulin syringe

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Patients Receive Monthly Feedback

All reminders and ordering via smartphone

- Achieving A1C goal
- Hypoglycemic events
- Lifestyle progress and additional tips
- Escalating reminders of upcoming Health Maintenance milestones
Brochure Describing the Diabetes Digital Medicine Program

Healthy Habits to Control Diabetes

- While you are tracking your blood sugar levels with the Diabetes Digital Medicine Program, what else can you do to control your diabetes and reduce its effects on your health? Here are a few helpful tips.

1. Focus on balanced nutrition by choosing a diet rich in high fiber foods, non-starchy vegetables, whole grains, lean proteins and lean proteins. Choose foods that are low in saturated or trans fats and trans fat-free.

2. Exercise regularly. Aim for 30 minutes a day of moderate-intensity exercise, like brisk walking, dancing or aerobics. Adding resistance training, like weightlifting or Pilates, a few times a week can help you get even better blood sugar control and keep your body toned.

3. Maintain a healthy weight. Keep in mind that even a moderate degree of weight reduction in overweight individuals will help improve your blood sugar and cholesterol levels.

4. Avoid or limit alcohol intake, and if you smoke, consider a smoking cessation program.

5. Reduce, or find healthy ways to manage stress. The hormones your body produces in response to prolonged stress can impair insulin from working properly, raising your blood sugars to new heights.

Visit the O Bar for High-Tech Help

This “Genius Bar” is in a healthcare setting offering technology to help you manage your health from home and keep you out of the physician’s office or hospital. Technology specialists are always on hand to help – ensuring you leave the O Bar armed with the tech tools and confidence that can guide you to better health, no matter your age or level of tech savviness.

If you’re managing diabetes, the O Bar offers:

- Technology experts who help with setting up smart blood glucose monitors.
- Actually tritons and scans for purchase.
- Access to an O Bar with physician-approved health apps focused on diabetes, fitness, healthy eating and more.
- Ongoing support for all your tech-related diabetes management questions.

Our technology specialists can help you start measuring and monitoring your blood sugar today.

DIABETES DIGITAL MEDICINE PROGRAM

Looking for a more convenient and comprehensive way to manage diabetes? Through the Diabetes Digital Medicine Program, take blood sugar readings at home and get your results sent in near real-time to your care team. Your physician will know the results of your blood glucose reading when you do, allowing your physician, pharmacist and health coach to make real-time adjustments to your care, as needed.

COMPREHENSIVE, CUTTING-EDGE CARE

For people living with diabetes, keeping up with all that is required to maintain good blood sugar levels can be a time-consuming and frustrating task. Traditionally, adjustments to your care were often only made during visits to your provider once or twice a year.

Now, you don’t have to wait for a doctor’s visit to optimize your treatment and care plan.

Ochsner’s Diabetes Digital Medicine Program is the future of medicine — convenient, real-time monitoring and coordinated care based on an award-winning model that is already helping more than 1,000 Ochsner patients better control their blood pressure and reducing hospital readmissions for heart failure patients.

Ochsner Digital Medicine

ENROLL OR LEARN MORE BY VISITING ochsner.org/diabetessmartmedicine

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Signing Up and Provider Preferences

Enrolled Programs
Below are the Digital Medicine programs you are currently enrolled in. Please contact (504) 842-1635 if you have any questions.

You are not currently enrolled in any Digital Medicine programs.

Available Programs
You are eligible to enroll for the following Digital Medicine program(s). After enrolling a member of the Epic Academy will visit you with the necessary onboarding documents for your signature.

Hypertension (Click to Enroll)
Patients with existing hypertension can be enrolled into a virtual hypertension monitoring program that follows current guideline-based standards of care. The patient must be active on MyOchsner and possess a smartphone in order to enroll.

Diabetes (Click to Enroll)
Patients with existing Type II Diabetes can be enrolled into a virtual Diabetes management program that follows current guideline-based standards of care. The patient must be active on MyOchsner and possess a smartphone in order to enroll.

Depression Treatment Preference
Please indicate your treatment preference if the depression screening tool, completed by the patient during onboarding, indicates a potential new diagnosis for your patient.

- Schedule appointment with PCP
- Refer to Psychiatry/Social Work (Current Preference)

Sleep Apnea Treatment Preference
Please indicate your treatment preference if the CSA screening tool, completed by the patient during onboarding, indicates a potential new diagnosis for your patient.

- Schedule appointment with PCP
- Refer to Sleep Medicine
- Refer to Pulmonology
- Schedule Sleep Study (Current Preference)

Auto Enrollment Of Eligible Patients
Please indicate if you would like to enable auto enrollment for patients eligible for Digital Medicine programs. Patients can be enrolled by APNs, Case Managers, Digital Medicine care team members, and through bulk enrollment workflows. You will be identified as the responsible provider for enrolled patients.

- Yes (Current Preference)
- No
Q&A

Moderator: Hector P. Rodriguez, Ph.D., M.P.H.
Professor, Health Policy and Management; Co-Director, Center for Health Organizational and Innovation Research (CHOIR); UCB SPH, Right Care Initiative Technical Expert Group
AUDIENCE QUESTION

Which diabetes care management strategy is most operationally feasible for your organization (or practice partners)?

A. Decision Support for Diabetes Care (CV Wizard)

B. ECHO (video consultations between PCPs and specialists)

C. Pharmacist on the care team

D. O-Bar (diabetes digital medicine)
AUDIENCE QUESTION

Optimal Diabetes Care: Achieving optimal care is challenging. Does your organization measure and provide feedback on “optimal care” for diabetes, as described by HealthPartners?

A. Yes

B. No
Integrating pharmacists onto adult primary care teams for medication management works when practices have high enough patient demand to support an on-site pharmacist with specialized training. For small primary care practices with limited onsite care management staff, how might patients benefit from pharmacists’ expertise?

A. Telephone or video visits with pharmacists supporting multiple practice sites

B. Work with local commercial pharmacies to collaboratively provide medication management services.

C. Other
AUDIENCE QUESTION

HealthPartners uses a diabetes “neighborhood” care team with the PCP, diabetes RN specialist, pharmacists, and registered dietician. Intermountain relies more heavily on pharmacist medication management. Are all care team roles needed to effectively manage diabetes care?

A. Yes

B. No
AUDIENCE QUESTION
To what extent are your patients ready for engagement in diabetes digital medicine?

A. Most are ready
B. Some are ready
C. Few are ready

John Cuddeback, M.D. Ph.D.
Chief Medical Informatics Officer, AMGA
Why is it so hard...

to improve A1c control, at the population level?

A1c < 8.0%

• While some people are coming into control, others are slipping out of control

• Some people who appear “safe” (A1c < 7.0%) are actually at risk of slipping out of control
  – Predictive model?
Changes in A1c Control, Year over Year

414,000 patients aged 18–75 with type 2 diabetes, across 34 AMGA member organizations, who had HbA1c measured in 2013, 2014, and 2015

Data are from the Optum One population health analytics platform
Optum is a Principal Corporate Collaborator for Together 2 Goal®
Changes in A1c Control over 12–15 Months

245,000 patients, aged 18–75, with type 2 diabetes, in the T2G denominator

Baseline

A1c ≥ 8%

A1c < 8%

12–15 Months

Stayed out of control
Moved out of control
Moved into control
Stayed in control

78%
22%

Move In
Stay Out
Stay In
Move Out
Changes in A1c Control over 12–15 Months

245,000 patients, aged 18–75, with type 2 diabetes, in the T2G denominator
“Leaky bucket” effect is very consistent, across 29 AMGA member organizations
Changes in A1c Control over 12–15 Months

245,000 patients, aged 18–75, with type 2 diabetes, in the T2G denominator

$\Delta$A1c

-1.8 average
-1.6 median

$\Delta$A1c

+1.6 average
+1.4 median
Changes in A1c Control over 12–15 Months

245,000 patients, aged 18–75, with type 2 diabetes, in the T2G denominator

5% of patients who appear to be “safe,” with initial A1c < 7.0, will slip out of control over 12–15 months

<table>
<thead>
<tr>
<th></th>
<th>Move In</th>
<th>Stay Out</th>
<th>Move In</th>
<th>Stay Out</th>
<th>Move In</th>
<th>Stay Out</th>
<th>Move In</th>
<th>Stay Out</th>
<th>Move In</th>
<th>Stay Out</th>
<th>Move In</th>
<th>Stay Out</th>
<th>Move In</th>
<th>Stay Out</th>
<th>Move In</th>
<th>Stay Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0 to 4.9</td>
<td>5.0 to 5.9</td>
<td>6.0 to 6.9</td>
<td>7.0 to 7.9</td>
<td>8.0 to 8.9</td>
<td>9.0 to 9.9</td>
<td>10.0 to 10.9</td>
<td>11.0 to 11.9</td>
<td>12.0 to 12.9</td>
<td>13.0 to 13.9</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Changes in A1c Control over 12–15 Months

245,000 patients, aged 18–75, with type 2 diabetes, in the T2G denominator

5% of patients who appear to be “safe,” with initial A1c < 7.0, will slip out of control over 12–15 months

Patients with Baseline A1c 5.5% to 6.9%

Increased Likelihood of Moving Out of Glycemic Control

- Age 18–64
- Insulin or 2nd line agents at baseline
- Count of microvascular complications
- A1c at baseline (closer to 6.9)
- Male
- Low-income insurance
- Depression (Dx on claim or problem list)
- Stage 2 systolic blood pressure
- Obesity (BMI ≥ 30)
- Smoker at baseline
IMPROVING A1C CONTROL: THE “LEAKY BOAT”

R. James (Jim) Dudl, M.D.
Diabetes ALL Champion & Community Benefits,
Kaiser Permanente
The “Plug the LEAK” Program

Jim.r.dudl@kp.org
Agenda

- What led to the discovery in Kaiser?
- What was devised to find patients likely to leak out?
- What has happened in
  - Hawaii
  - So Cal Kaiser
Question:

What efficiency could a model produce to find patients whose A1C will >8 next year?

A. 1.1 fold
B. 1.2 fold
C. 1.3 fold
D. 1.4 fold
E. 1.5 fold
FOUND: While 24% lowered to A1C <8, 22% rose to >8 in 1 year

### Challenges: Maintaining A1c Control

**“Leak in the Boat”**

<table>
<thead>
<tr>
<th>Month</th>
<th># of Pts A1c &gt;8%</th>
<th># of Pts moved to &gt;8%</th>
<th>% Pts moved to A1c &gt;8%</th>
<th># of Pts A1c &lt;8%</th>
<th># of Pts moved to &lt;8%</th>
<th>% Pts moved to &lt;8%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul-14</td>
<td>1257</td>
<td>289</td>
<td>23.0%</td>
<td>2278</td>
<td>330</td>
<td>14.5%</td>
</tr>
<tr>
<td>Aug-14</td>
<td>1238</td>
<td>258</td>
<td>20.8%</td>
<td>2097</td>
<td>282</td>
<td>22.3%</td>
</tr>
<tr>
<td>Sep-14</td>
<td>1172</td>
<td>281</td>
<td>24.0%</td>
<td>2265</td>
<td>281</td>
<td>24.0%</td>
</tr>
<tr>
<td>Oct-14</td>
<td>1160</td>
<td>264</td>
<td>22.8%</td>
<td>2041</td>
<td>339</td>
<td>27.4%</td>
</tr>
<tr>
<td>Nov-14</td>
<td>910</td>
<td>173</td>
<td>19.0%</td>
<td>1480</td>
<td>319</td>
<td>30.2%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10257</td>
<td>2340</td>
<td>22.8%</td>
<td>18101</td>
<td>2549</td>
<td>24.4%</td>
</tr>
</tbody>
</table>
So How Can We Prevent This?

Risk Prediction for HbA1C Control: A Predictive Analytics Solution
“We could identify the 32% of pts that model said would be 58% of those who would go over 8 A1C”

<table>
<thead>
<tr>
<th>Approx. Probability Cutoff</th>
<th>N Targeted for Outreach</th>
<th>N Observed Out of Control</th>
<th>Precision (TP / TP + FP)</th>
<th>Recall (TP / TP + FN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>22689</td>
<td>7968</td>
<td>35%</td>
<td>75%</td>
</tr>
<tr>
<td>15%</td>
<td>15679</td>
<td>6634</td>
<td>42%</td>
<td>63%</td>
</tr>
<tr>
<td>20%</td>
<td>11506</td>
<td>5508</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>25%</td>
<td>8593</td>
<td>4518</td>
<td>53%</td>
<td>43%</td>
</tr>
<tr>
<td>30%</td>
<td>6602</td>
<td>3745</td>
<td>57%</td>
<td>35%</td>
</tr>
<tr>
<td>50%</td>
<td>2392</td>
<td>1620</td>
<td>68%</td>
<td>15%</td>
</tr>
<tr>
<td>32%</td>
<td>5899</td>
<td>3431</td>
<td><strong>58%</strong></td>
<td><strong>32%</strong></td>
</tr>
<tr>
<td>prior ≥ 7.8</td>
<td>5891</td>
<td>2319</td>
<td><strong>58%</strong></td>
<td><strong>32%</strong></td>
</tr>
</tbody>
</table>

A prior score “cut-off” of ≥ 7.8 captures 22% of those at risk of falling out of control, but only correctly identifies 39% as at-risk.

Our model improves on these metrics substantially – captures 32% and correctly identifies 58%. A multiple of approximately 1.5x on both.

**Precision (Quality):**
The predictive power of the model. Out of all the members the model would have predicted were out of control, the total % that truly were.

**Recall (Quantity):**
The % of members accurately described by the model as being out of control. Can be described as “Completeness” or “True Positive Rate.”

* TP: True Positive
* TN: True Negative
* FP: False Positive
* FN: False Negative

Model 1.1 (18-64 yo)*:

70 factors analyzed, most important or A1c >7.8. last test higher than prior, last test long ago, etc.
Reg 1: in 3 yrs might have down trend in leak [red] but also those lowered [green] due to resource shift
Region 2: predicted 20% would go over threshold, reduced to 12.3% by proactive attention to control

“Eleven areas met the overall decrease of 12.3% in comparison with baseline). Without a specific focus on these patients we would have likely seen a 20% decrease, and without addressing this “leaking,” our overall A1c control rate would not improve”
Question:

What efficiency could a model produce to find patients whose A1C will >8 next year?

A. 1.1 fold
B. 1.2 fold
C. 1.3 fold
D. 1.4 fold
E. 1.5 fold