



# Community Health Center Electronic Patient Engagement Adoption Framework

HEALTH INFORMATION TECHNOLOGY,  
**HIT**EQ  
EVALUATION, AND QUALITY CENTER

May 1, 2018

# Session Agenda

- Part 1: Overview of Electronic Patient Engagement
- Part 2: Electronic Patient Engagement Use Case
- Part 3: Electronic Patient Engagement Assessment and ROI

# Using Slido for Engagement

1

We'll be using Slido for part of the discussion and polling

2

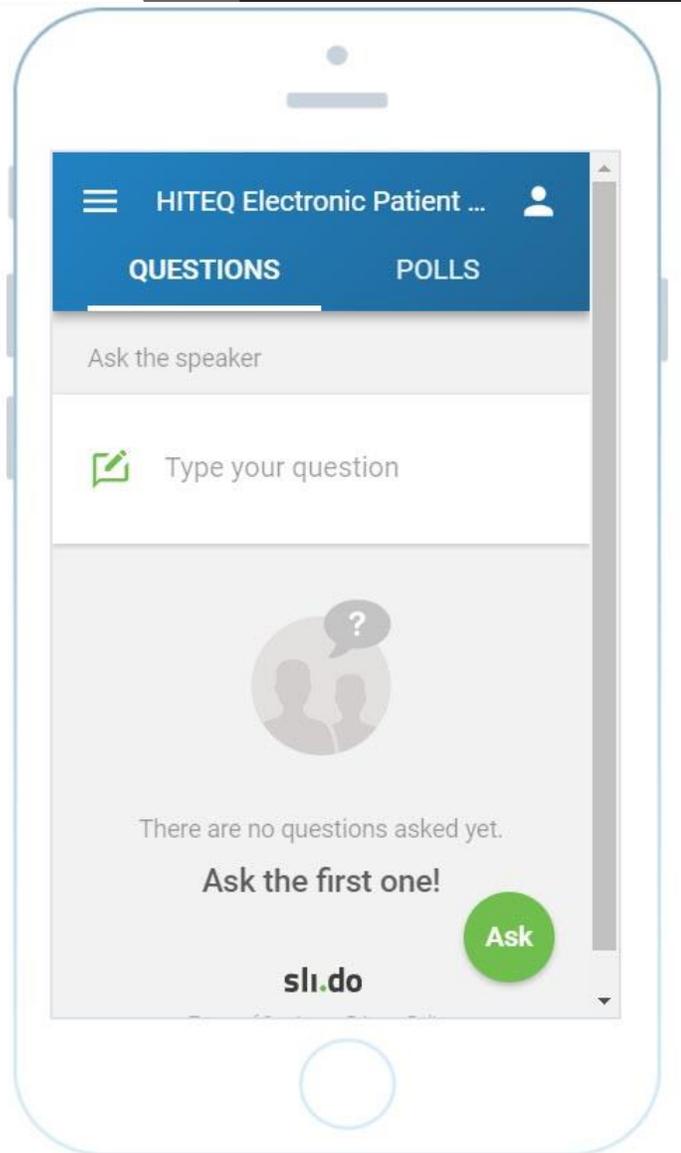
Go to [Slido.com](https://www.slido.com)

3

Enter event code:

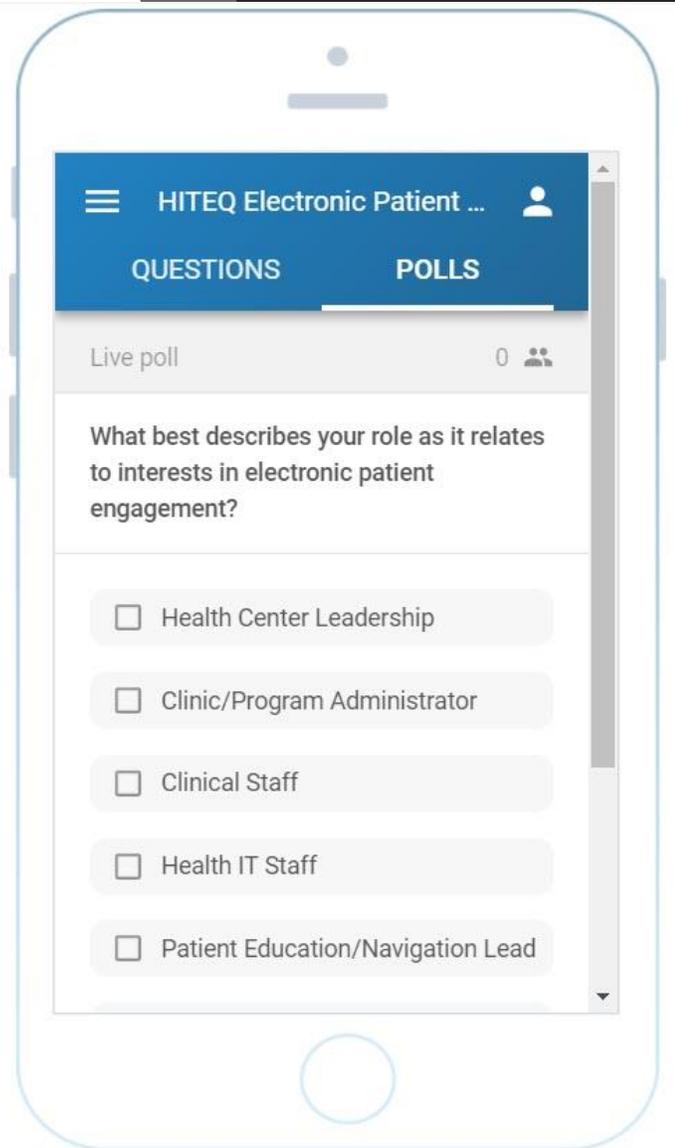
#HITEQEPE

# Asking Questions



- Click on the Questions tab in the Slido menu space
- Or just raise your hand the good old fashioned way 😊

# Responding to Polls



- Click on the Polls tab in the Slido menu space
- Navigate to the current poll and respond
- Or respond to a previous poll when you are able



# Part 1: Overview of Electronic Patient Engagement

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# Patient Activation & Engagement

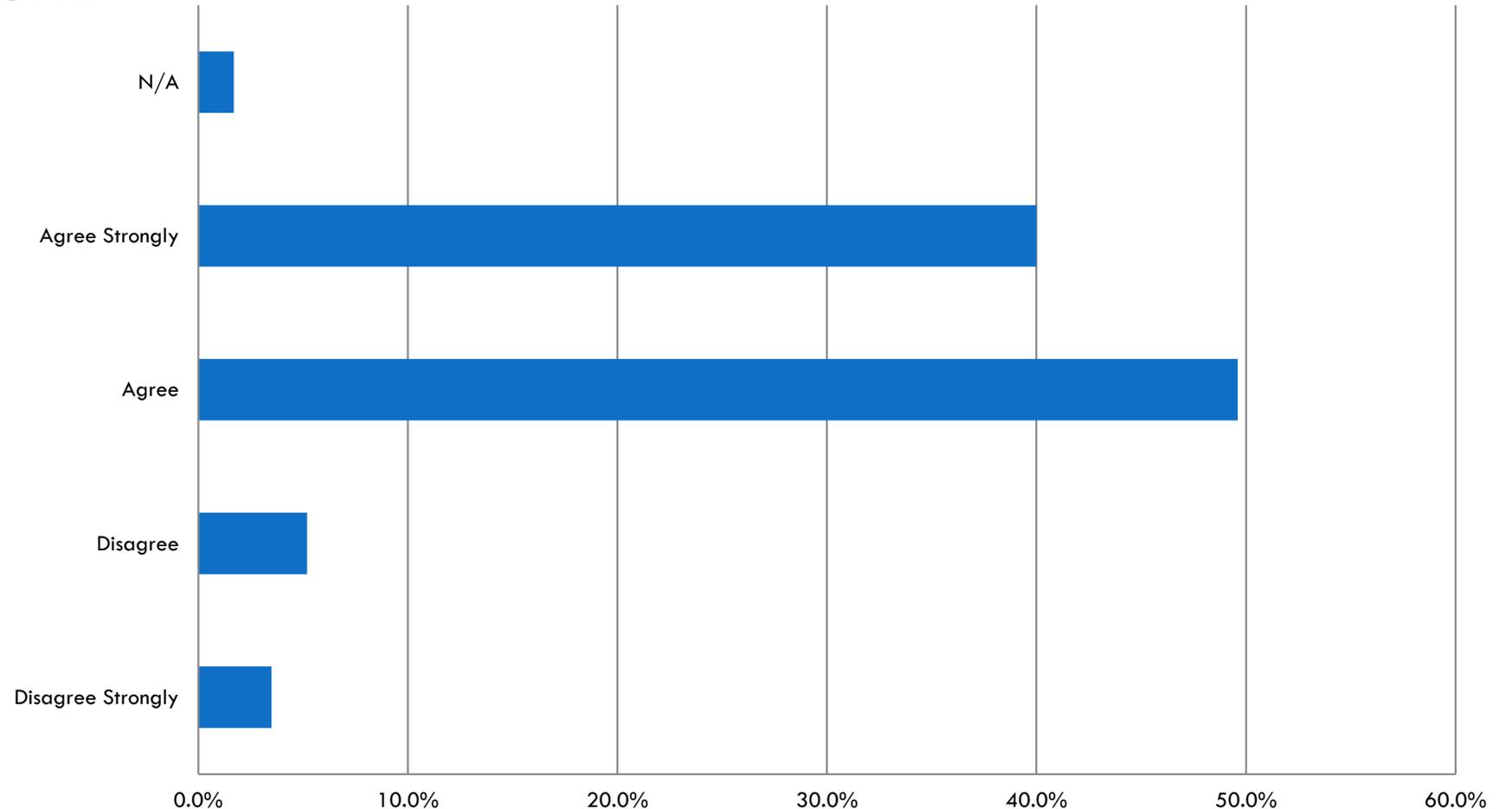
- **Patient activation** refers to a patient's knowledge, skills, ability, and willingness to manage his or her own health and care
- **Patient engagement** is a broader concept that combines patient activation with interventions designed to increase activation and promote positive patient behavior.



# Patient Activation Need vs Ability

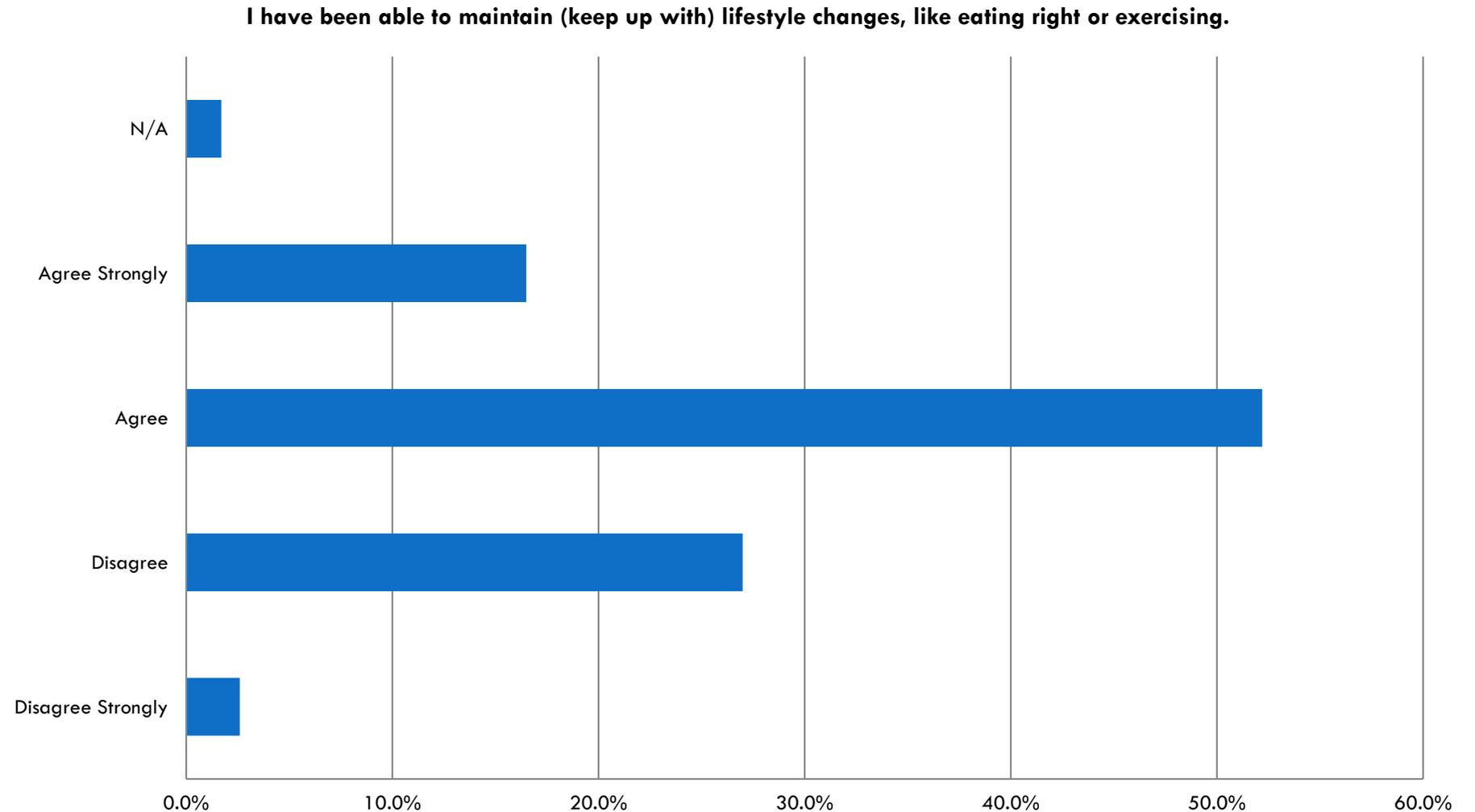
Taking an active role in my own health care is the most important thing that affects my health

**Acknowledgement  
of the need for  
activation**



# Patient Activation Need vs Ability

**Personal  
ability to be  
activated**



# Poll: Your Role and EPE Interest

- Go to [slido.com](https://www.slido.com) -> Event Code: #HITEQEPE
- What best describes your role as it relates to interests in electronic patient engagement?
  - Health Center Leadership
  - Clinic/Program Administrator
  - Clinical Staff
  - Health IT Staff
  - Patient Education/Navigation Lead
  - Other health center related staff

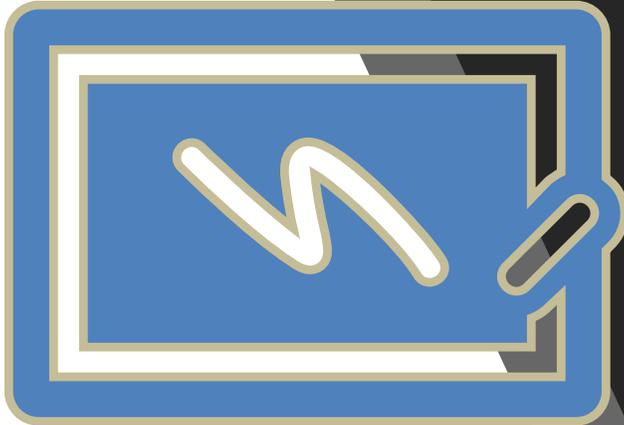


# Poll: EPE Implementation

- Go to [slido.com](https://www.slido.com) -> Event Code:

#HITEQEPE

- What methods of electronic patient engagement are you using with your patients?
  - Use of Patient Portal
  - Social Networking strategies
  - Text Messaging strategies
  - Mobile Health app strategies
  - Other EPE Tools
  - Not using EPE for CRC screening...yet



# Patient Engagement Opportunity

- Consumers want to access care on their own terms.
- Patient engagement improves overall health outcomes, while fostering meaningful collaboration between patients and healthcare providers.
- Effective ways for health centers to engage patients include:
  - implementing patient specific education
  - preventive care appointment scheduling
  - health tracking
  - comprehensive patient portal adoption

# Electronic Patient Engagement Factors

- Can be a more reliable way to get in touch with some patients, such as those who do not have a stable address or phone number.
- Allows greater confidentiality for patients, avoiding the need for phone messages or undesired face to face contact.
- Patients may be more comfortable communicating about sensitive issues via secure messaging.



# Policy-related factors: Constraints and Considerations

- **Meaningful Use (now Promoting Interoperability)**
  - Difficult to meet Patient Electronic Access objectives.
  - Protection of Electronic Health Information measures makes it difficult to entertain new innovations in electronic patient engagement tools
- **HIPAA**
  - Imposes significant constraints on deploying potentially high impact electronic patient engagement opportunities.
  - Still many grey areas surrounding secure messaging and related HIPAA constraints
- **CMS Reimbursement**
  - Reimbursement opportunity and rates for electronic patient engagement implementation and use are still under development
  - However updated CPT Codes, primarily for telehealth are currently being rolled out



# Poll: EPE Adoption Barriers

- Go to [slido.com](https://slido.com) -> Event Code: #HITEQEPE
- What are key barriers you have experienced when trying to implement electronic patient engagement strategies?
  - Patient interest in adoption
  - Cost of infrastructure
  - Language / Literacy Issues
  - Effective Technical Support
  - Poorly designed tools
  - Workflow Issues



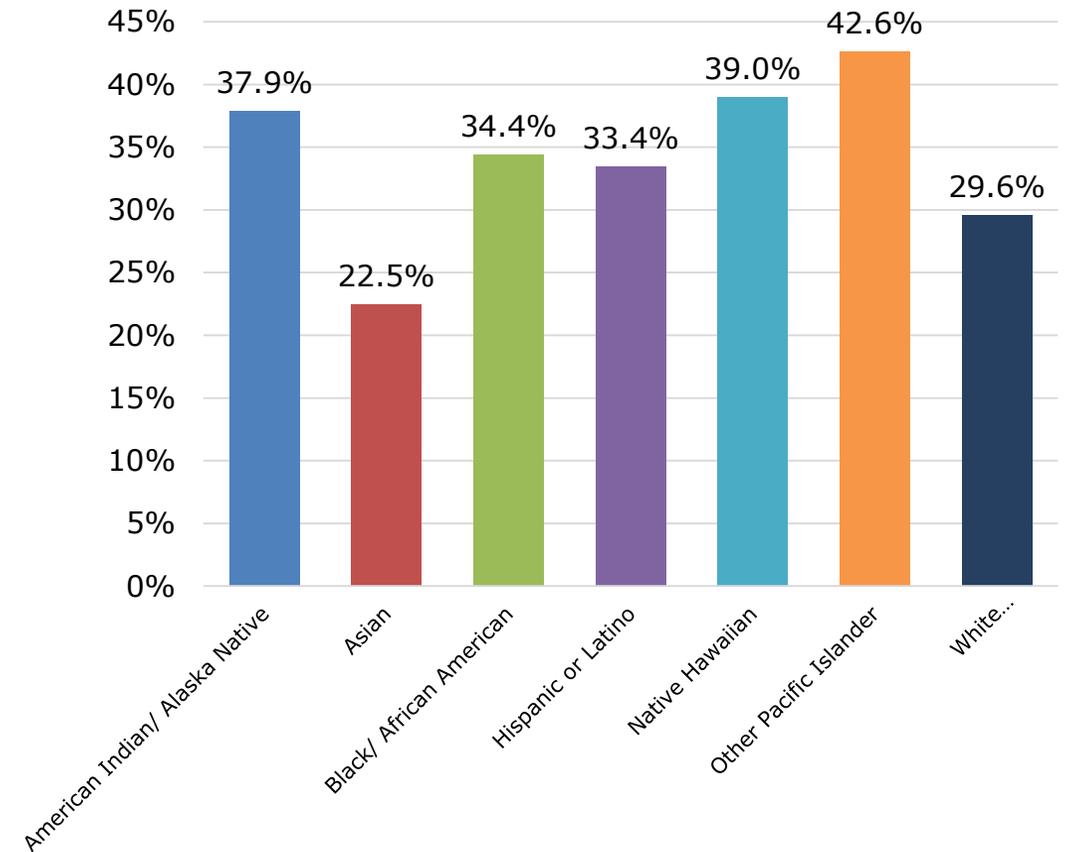


# **Part 2: Diabetes Use Case for Electronic Patient Engagement**

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# BPHC Diabetes Improvement Goal

- **Performance Measure:** Percentage of patients 18-75 years of age with diabetes who had hemoglobin A1c > 9.0% during the measurement period
- **Target Goal:** By the end of the project period, decrease the percent of adult patients with type 1 or 2 diabetes whose most recent HbA1c is greater than 9%
- **Numerator:** Patients whose most recent HbA1c level (performed during the measurement period) is >9.0%
- **Denominator:** Patients 18-75 years of age with diabetes with a visit during the measurement period



# Problem Statement

- Key barriers to effective diabetes care:
  - lack of patient activation and engagement with their diabetic care plan
  - lack of medication adjustment by physicians during clinical encounters
- Patients have difficulty adhering to diabetes regimens including:
  - Glucose monitoring
  - Diet & Exercise
  - Medication adherence
  - Understanding care plans
- A myriad of factors impact a patient's ability to manage their condition including:
  - Health beliefs
  - Current knowledge
  - Physical limitations
  - Related socio-economic factors (e.g., culture, education, economics)

# Diabetes Patient Engagement Best Practices

- **National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) Guidelines:**
  - **Share-Decision Making:** the patient must be well-informed of the treatment options and clinical evidence around managing diabetes.
  - **Motivational Interviewing:** done through asking open-ended questions, affirming the patient's responses, reflecting on their views and summarizing the discussion
  - **Goal Setting:** assist patients in setting goals for self-care behaviors that include eating healthy, being physically active, adhering to medication and monitoring health.

# Poll: EPE for Diabetes Improvement



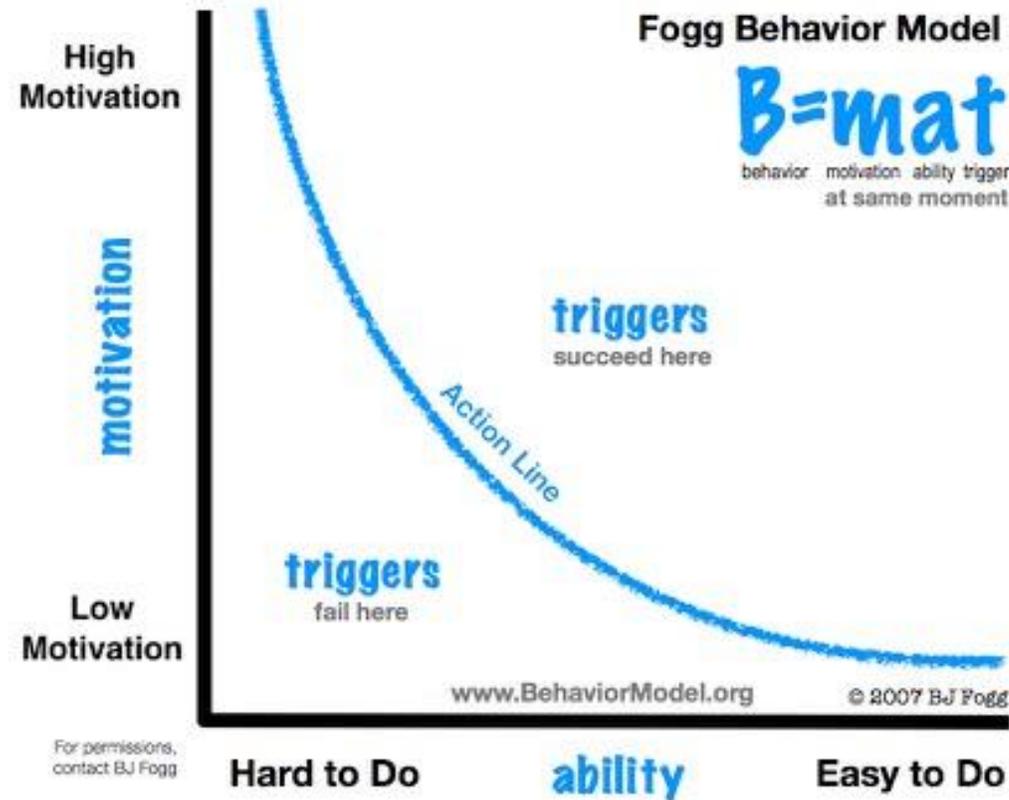
- Go to [slido.com](https://www.slido.com) -> Event Code:  
  
#HITEQEPE
- What type of electronic patient engagement activities are you using for your diabetes patients?
  - Use of Patient Portal
  - Social Networking strategies
  - Text Messaging strategies
  - Mobile Health app strategies
  - Other EPE Tools
  - Not using EPE for diabetes...yet

# Electronic Patient Engagement Opportunities

- Decisions most affecting diabetes management are made by the patients themselves
- Technologies that target patient/consumer engagement are having a significant impact on diabetes-related health outcomes.
- Provides opportunities to:
  - increase patient to provider communication
  - provide patients with personalized hemoglobin A1c (HbA1c) reports
  - provide real time access to lab results and education
  - increase patient involvement in their care planning



# Fogg Behavior Model



For permissions,  
contact BJ Fogg

# Diabetes Management Behavior Change = MAT

- **MOTIVATION:** help patients understand the impact small changes in diabetes self-management can make
- **ABILITY:** anticipate objections, educate accordingly, and deploy the right interventions at the right time
- **TRIGGER:** get patients enrolled in a “project” that supports them in every step

# Crossing Healthcare Diabetes Self-Management Education Program

- Providers refer patients and an initial assessment is completed.
- Patients are then enrolled in a total of 10 hours of diabetes education classes across multiple days throughout the program.
- Three months later, a follow-up appointment is completed to review lab work changes, weight changes and where each patient is with their personal goals.
- Once they complete the entire education program, patients are then enrolled in a social media support group through a private Facebook account that allows them to engage with their peers.



# Diabetes Health IT Cost Savings Impact Example

## Project HOPE Chicago - Mobile Phone Diabetes Project

- A primary-care-based mobile health program that sends health-behavior-related text messages to diabetes patients both improved outcomes and reduced costs.
- Treatment participants were an average age of 53 years old and had a diabetes duration of 8 years. Two-thirds were African American.
- Total healthcare costs declined by a significant \$812 per patient over the 6 months, including a drop of \$1332 for outpatient visits
- Costs of the mHealth program were estimated to be \$375/participant, **suggesting a net cost savings of \$437/participant (\$812-\$375)**

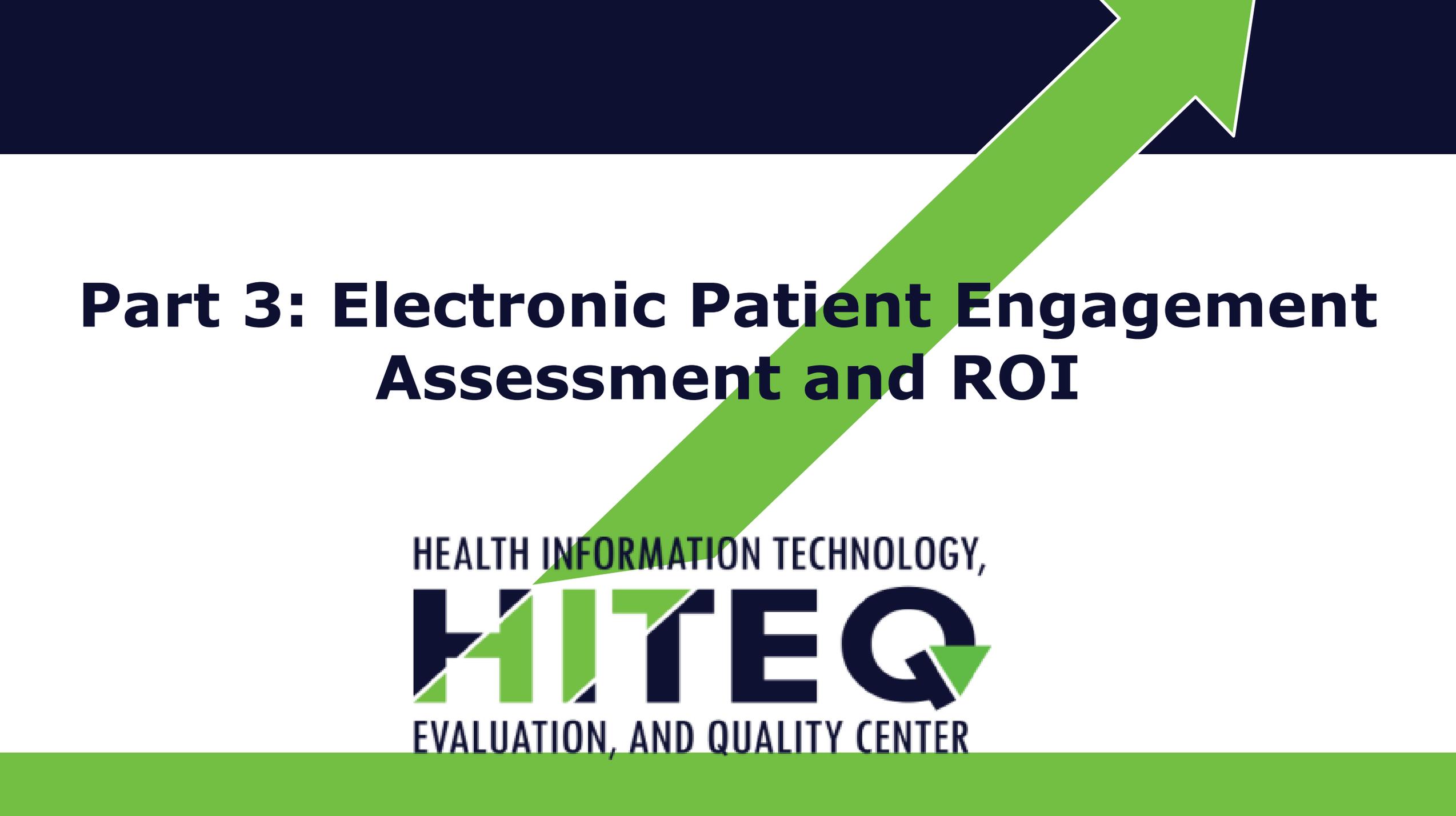
# Health Apps & Diabetes

## One app does not rule them all!

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- Apps that provided feedback from healthcare professionals produce greater reductions in blood glucose levels than automated advice
- Apps that allowed users to track more than three self-monitoring tasks produce greater reductions in blood glucose levels





# Part 3: Electronic Patient Engagement Assessment and ROI

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# Poll: EPE Evaluation

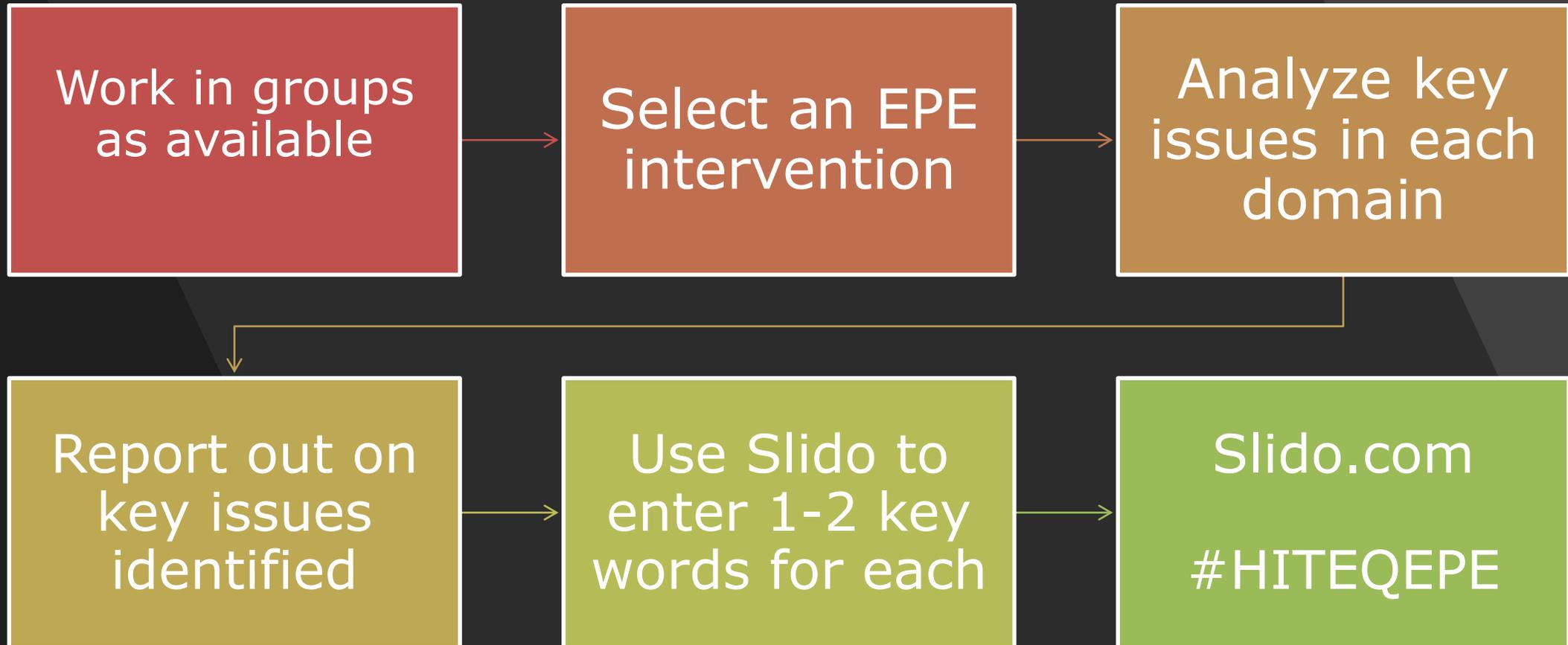


- Go to [slido.com](https://www.slido.com) -> Event Code:  
`#HITEQEPE`
- How are you evaluating the effectiveness of electronic patient engagement implementation?
  - Frequency of use by patients
  - Patient satisfaction surveys
  - Population health outcomes
  - Cost-Benefit analyses
  - Other evaluation methods
  - Well...maybe...but...maybe not really

# EPE Adoption Framework

Conceptual Level	Constructs	Factors
<b>Personal</b>	<ul style="list-style-type: none"> <li>• Cultural</li> <li>• Financial</li> <li>• Education</li> <li>• Behavioral</li> </ul>	<ul style="list-style-type: none"> <li>• Significant differences to be expected depending on Socio-Economic Status</li> <li>• Engagement and activation factors key to sustainability</li> </ul>
<b>Technical</b>	<ul style="list-style-type: none"> <li>• Standards</li> <li>• Regulations</li> <li>• Precision</li> </ul>	<ul style="list-style-type: none"> <li>• U.S. HIE standards still primarily based within the clinical environment</li> <li>• Precision of metrics and device ability to effectively report are in need of continued innovation</li> <li>• Systems designs still not targeted to the underserved</li> </ul>
<b>Organizational</b>	<ul style="list-style-type: none"> <li>• Workflow</li> <li>• Workforce</li> <li>• Reimbursement</li> </ul>	<ul style="list-style-type: none"> <li>• Few clinical workflows include procedures for incorporation of patient reported data</li> <li>• Concerns by clinicians of responsibility to act (or not) on data provided to them</li> </ul>
<b>Policy</b>	<ul style="list-style-type: none"> <li>• Security</li> <li>• Privacy</li> <li>• Quality</li> <li>• Prevention</li> </ul>	<ul style="list-style-type: none"> <li>• U.S. government is working hard to keep up in establishing policies that provide effective guidance toward patient portal adoption</li> <li>• Need further work in finding the balance between protection and effective use</li> </ul>

# EPE Adoption Framework Activity



# Adoption and Implementation Questions

- **User Question:** How can EPE tools support your patients in diabetes management? What barriers will they experience?
  - *reminders/ appointment management / communication/ FAQs*
- **Technology Question:** How well do certain EPE systems fit for the technology access and utilization patterns of your population?
  - *email access / computers vs mobile / social networking presence*

# Adoption and Implementation Questions

- **Organization Question:** How well does the EPE system integrate with our organizational practices and current resource constraints?
  - *Patient Navigators / Staff Training / IT Support*
- **Policy Question:** What privacy and security constraints need to be addressed in order to effectively integrate and deploy a particular EPE strategy?
  - *Text and HIPAA / Patient Consent / Opt-in vs Opt-out strategies*

# Measuring ROI

- How will you determine whether you are achieving the desired results?
- What specific measures can be used to determine whether you are accomplishing the goals of your implementation?
- How will your report out on satisfaction and outcomes?

# Key EPE ROI Evaluation Questions

- 1) What is the purpose in implementing the patient portal?
- 2) Who are your targeted clients?
- 3) Based on the clients targeted, what is it they value most in terms of health services?
- 4) How will you determine whether you are achieving the desired results?
- 5) Based on the desired results you have outlined, what is your plan to achieve them?

(Derived from Drucker's 5 Most Important Questions)

# Measures vs Metrics

- **Measures:** concrete, usually measure one thing, and are quantitative in nature (e.g. I have five apples).
  - # of patients who have logged into the patient portal
  - # of patients who have scheduled an appointment through the patient portal
- **Metrics:** describes a quality and require a measurement baseline
  - Engagement Rate - percentage of single visits
  - Session Duration Average – the average amount of time a user spends on your website for a given session



# Performance Evaluation Measures

**Process/Implementation :** determines whether program activities have been implemented as intended.

- How well the program is currently working
- The extent to which the program is being implemented as designed.
- Whether the program is accessible and acceptable to its target population.

**Outcome/Effectiveness:** Measures short and long-term outcomes

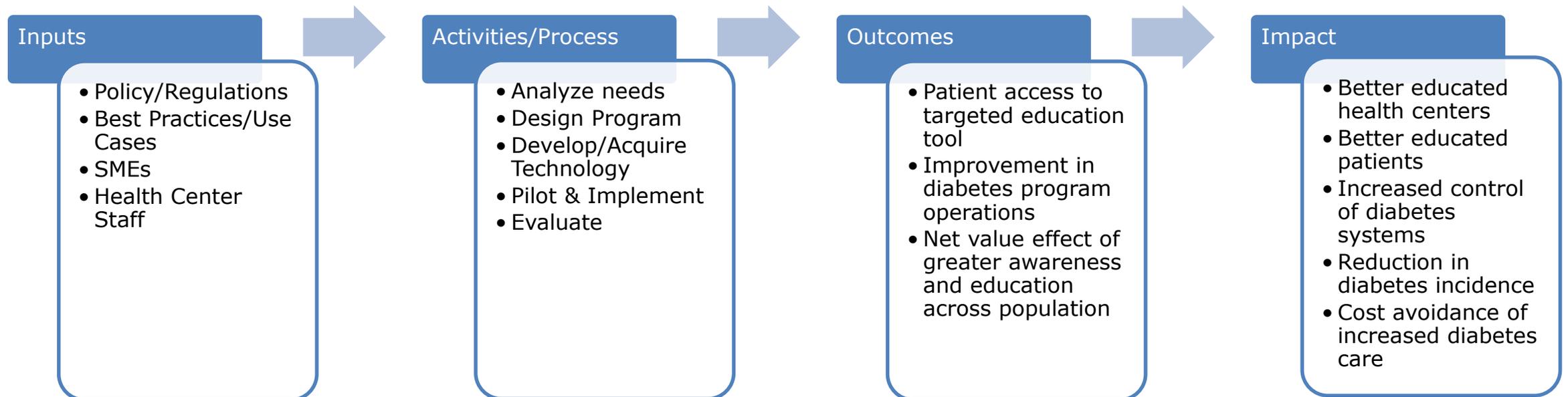
- The degree to which the program is having an effect on the target population's behaviors.

**Impact Evaluation:** Measures short and long-term outcomes

- The degree to which the program is having an effect on the target population's behaviors.

# What is your Logic Model for evaluating your effort?

- **Increase Diabetes Prevention Efforts**
  - Increase the percentage of adults who receive weight screenings & counseling
  - Increase the percentage of children who receive weight screenings & counseling
- **Improve Diabetes Treatment And Management**
  - Reduce the proportion of persons with diabetes with an HbA1c value >9%
  - Increase health centers meeting Healthy People 2020 goals



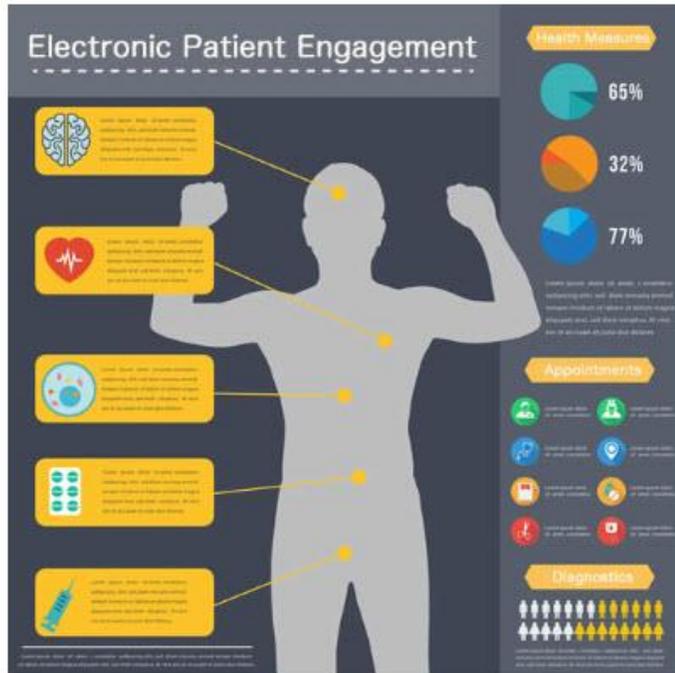
# Conclusion: Expected Results for Health Centers

- Improved health and access to personal health information and services for our complex and diverse community of patients
- Activation and empowerment of patients to take on more responsibility in managing their medical conditions
- Support better coordination and communication between the broad patient care and social network
- Increased opportunities toward financial sustainability of community health centers by leveraging tools that provide ways to increase services while decreasing costs

# Want more information?

## Community Health Center Adoption Framework for Electronic Patient Engagement

Methods for deploying more personalized care to underserved populations



Over the last decade, electronic personal health records (PHR) systems, and the patient portals used to provide patients access to those records, have become interwoven into the fabric of the U.S. healthcare system. A recent study has found that adoption of personal health records (PHRs) will increase to the point where 75 percent of adults will use a PHR by 2020.

Unfortunately, there is still a broad gap between the effective use of PHR technologies where advanced health information services are perhaps most needed, especially within the underserved communities supported by community health centers. A recent report by the Commonwealth Fund found that while the majority of federal qualified health centers were not using Electronic Health Records, only 35 percent of health centers can electronically send patients reminder notices for preventive or follow-up care, the same percentage reported in 2009. Clearly, there is ground to cover.

This guide provides health centers with an adoption framework and guidelines that can be used to assess the goals and methods for deploying electronic patient engagement services. The approach is multi-

dimensional, in that it recognizes the interrelated socio-economic, user, organizational and policy elements to success adoption and use.

### Need Assistance?

Would you like more assistance regarding Evaluation of Engagement and Satisfaction strategies or support in using any of the included resource sets?

[Request Support](#)

### Upcoming Events

5/25 HITEQ Highlights: The ABCs of Electronic Dental Records for Health Centers – Integrating and Reporting Dental Information (5/25/2017 3:00 PM - 4:00 PM (UTC-05:00) Eastern Time (US & Canada))

Optimizing the Presentation and Visualization of Health Data for Patients and Providers (5/30/2017 1:30 PM - 3:00 PM (UTC-05:00) Eastern Time (US & Canada))

Data Transparency Summit Part II (6/5/2017 10:00 AM (UTC-05:00) Eastern Time (US & Canada))

# Comments, Questions, and Discussion



# Questions? Comments?

**Contact HITEQ at:** [hiteqcenter.org](http://hiteqcenter.org)

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@HITEQCenter

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Please take our evaluation!!!

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