

How to Create a Statewide Evidence-Based Nursing Workforce

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Objectives

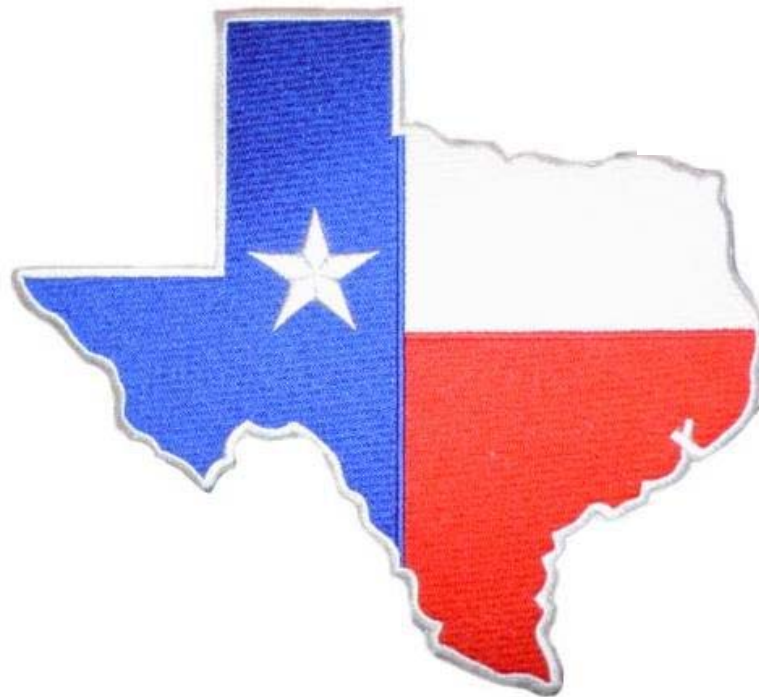
- 1: Describe the steps taken to create a sustainable state wide evidence-based practice program
- 2: Delineate the specific approaches to educating the three major nursing contingents:
 - clinicians, managers, and educators



Background

- There is an ever increasing requirement of the nursing workforce to be evidence-based in their practice.
- A challenge to the current nursing healthcare workforce is that experienced nurses may not have received EBP education.
- In response, the Center developed the EBP program to improve nursing workforce EBP capacity.
- Regional endeavors are prevalent across the country, but this single statewide strategy is unique in the nation, encouraging incorporation of evidence-based practices across multiple institutions by clinicians, managers, and educators.

So, you think your state is big...



Try putting an ocean
in the middle of it!



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Demographics

Current Licensing Numbers

(4/21/2017)

	LPN	RN	APRN
Active	2797	26524	1472
In State	2180	16436	1078

Hawai'i RN Facts

HSCN 2015 Nursing Workforce Report

- Island of Residence
 - 74% on O'ahu
- Staffing
 - 70% staff nurses
 - 58% RNs work in hospital settings
- Education
 - 68% BSN or higher across all license groups
 - 8% of RNs report current enrollment in a degree-seeking program
 - 13%-25% RNs have achieved academic progression

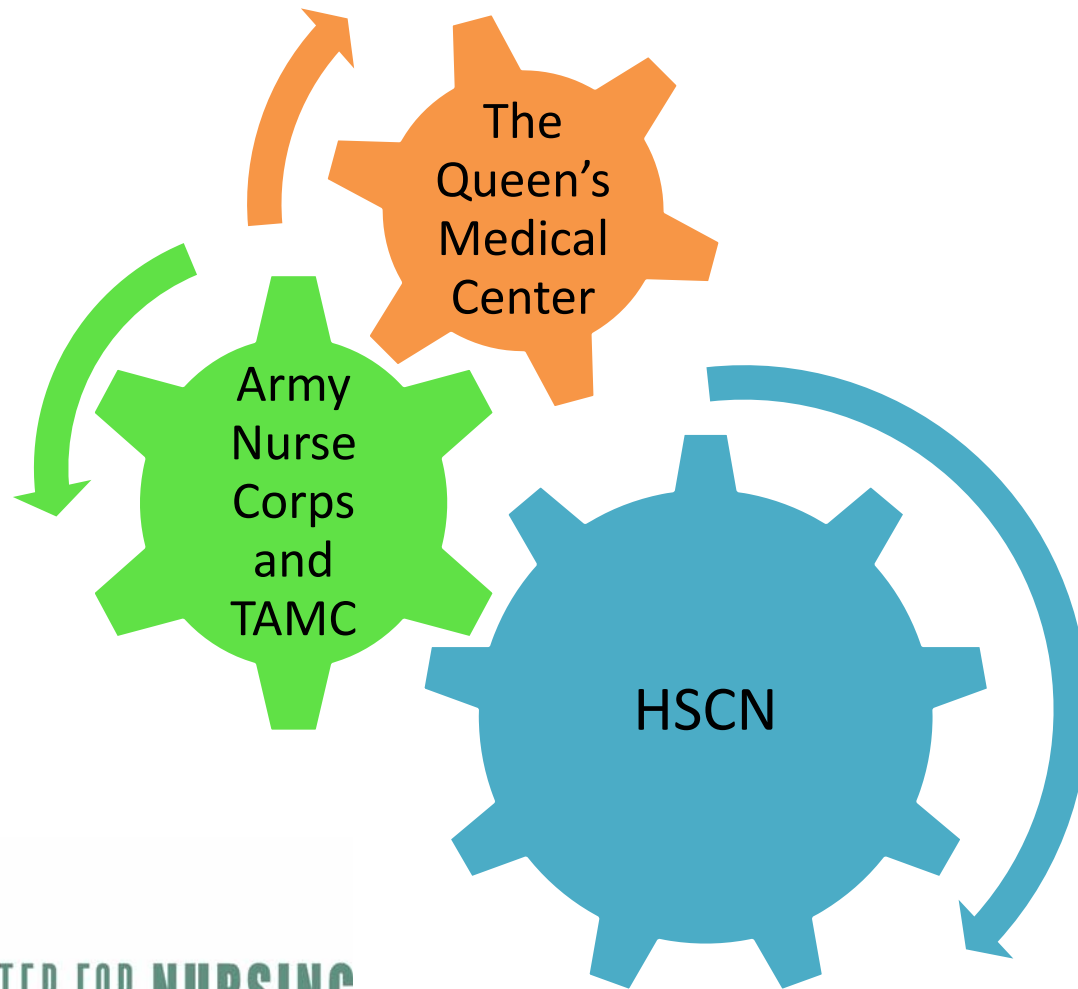
Hawai`i State Center for Nursing

- A little history...
 - HSCN established by mandate in 2003 to address the nursing shortage
 - Defines 4 functions of the Center including to:



Conduct research on best practices and quality outcomes

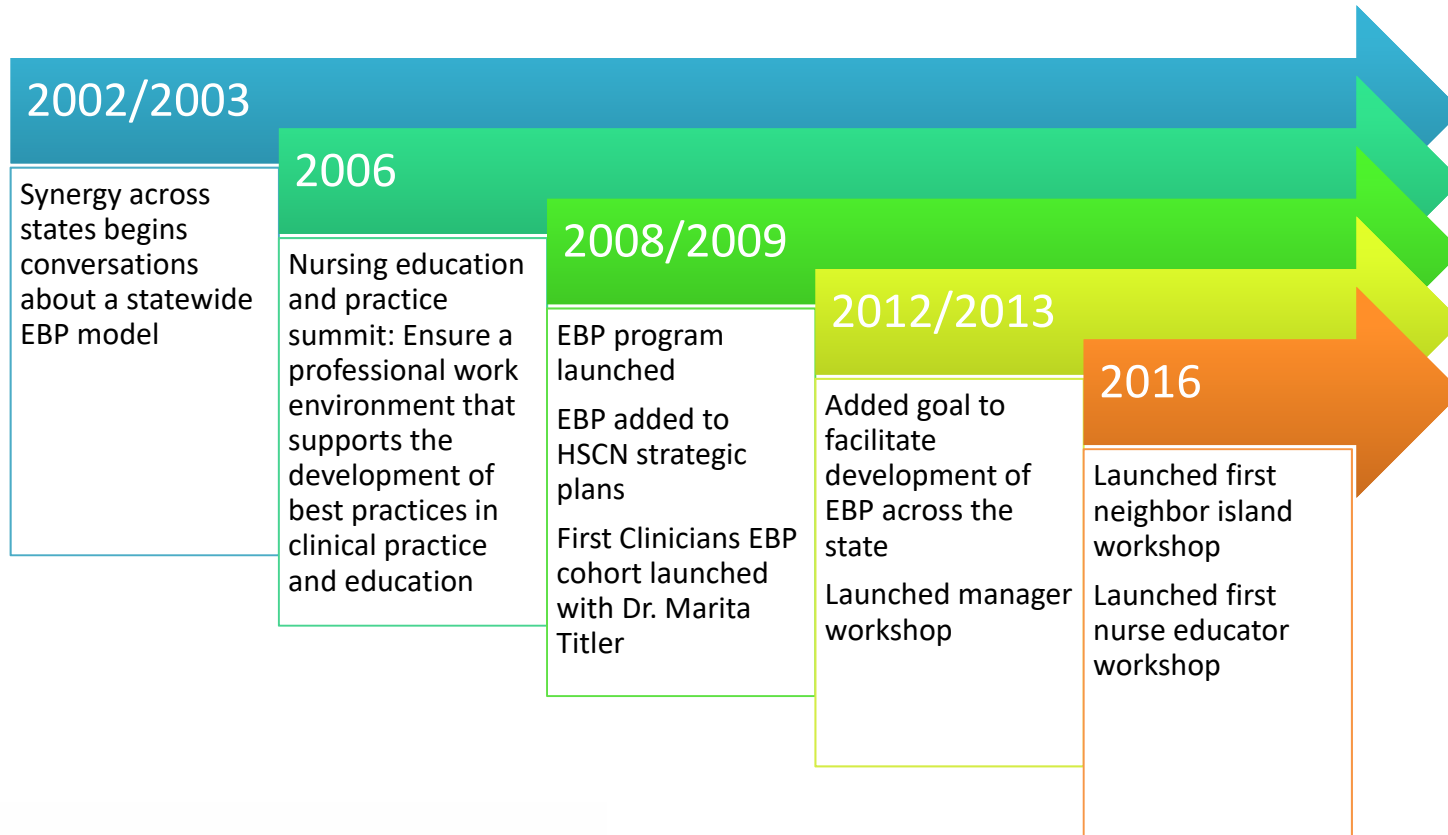
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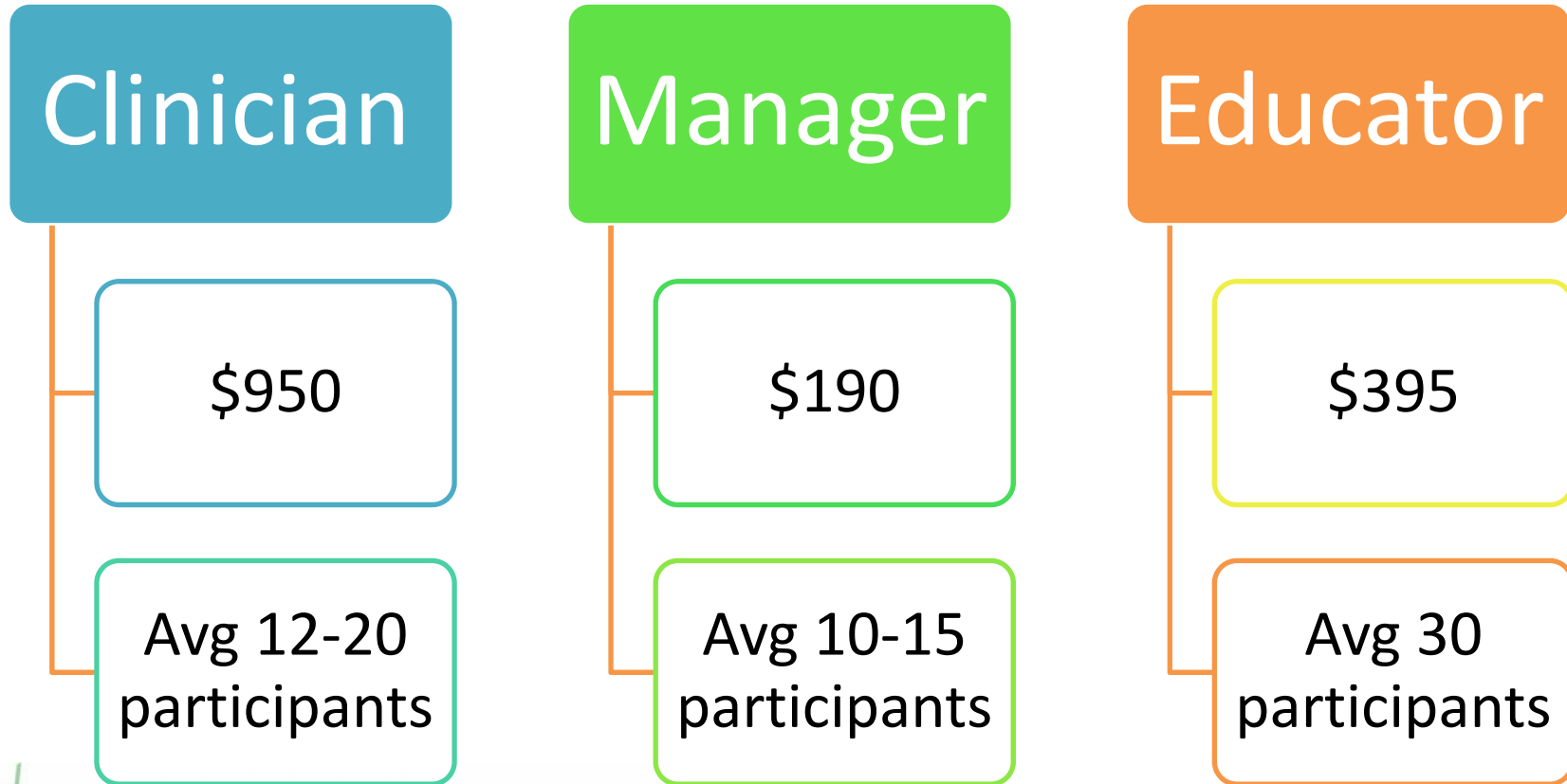
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Establishing EBP within the Center and State



Cost



Financials

- Annually, program registration covers administrative and implementation costs.
- Additional revenues over \$5,000 are used for participant travel support and staff compensation to ensure the sustainment, spread, and scale.



What is Evidence-Based Practice?

- Integration of best research evidence with clinical expertise and patient values (Sackett et al, 2000)
- Process of using current evidence to guide practice and clinical decision-making. Process piece of outcomes management. (Jennings and Loan, 2001)
- Evidence-based practice is the process of shared decision-making between practitioner, patient and others significant to them based on research evidence, the patient's experiences and preferences, clinical expertise or know-how, and other available robust sources of information (STTI, 2008)



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What EBP is not

- Conduct of research → generation of new knowledge
- “Best practice” – following what are other centers doing
- Quality Assessment/Improvement
- Synthesis of research only

Structure: Resources



Structure: Conceptual Model

Iowa Model

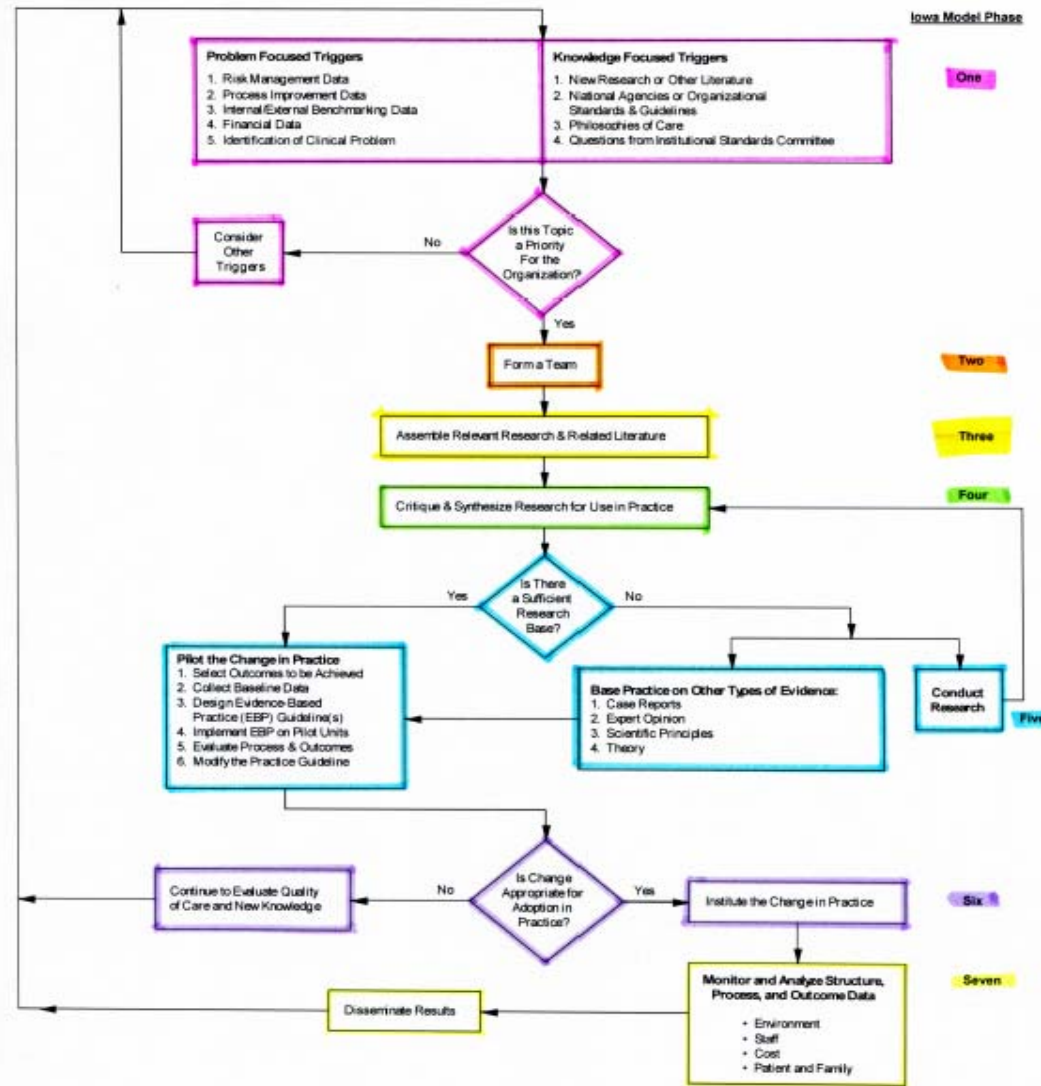
Logical Sequence/Non-Linear

Organizationally sensitive

Utilizes all evidence



The Iowa Model of Evidence-Based Practice to Promote Quality Care



◇ = a decision point

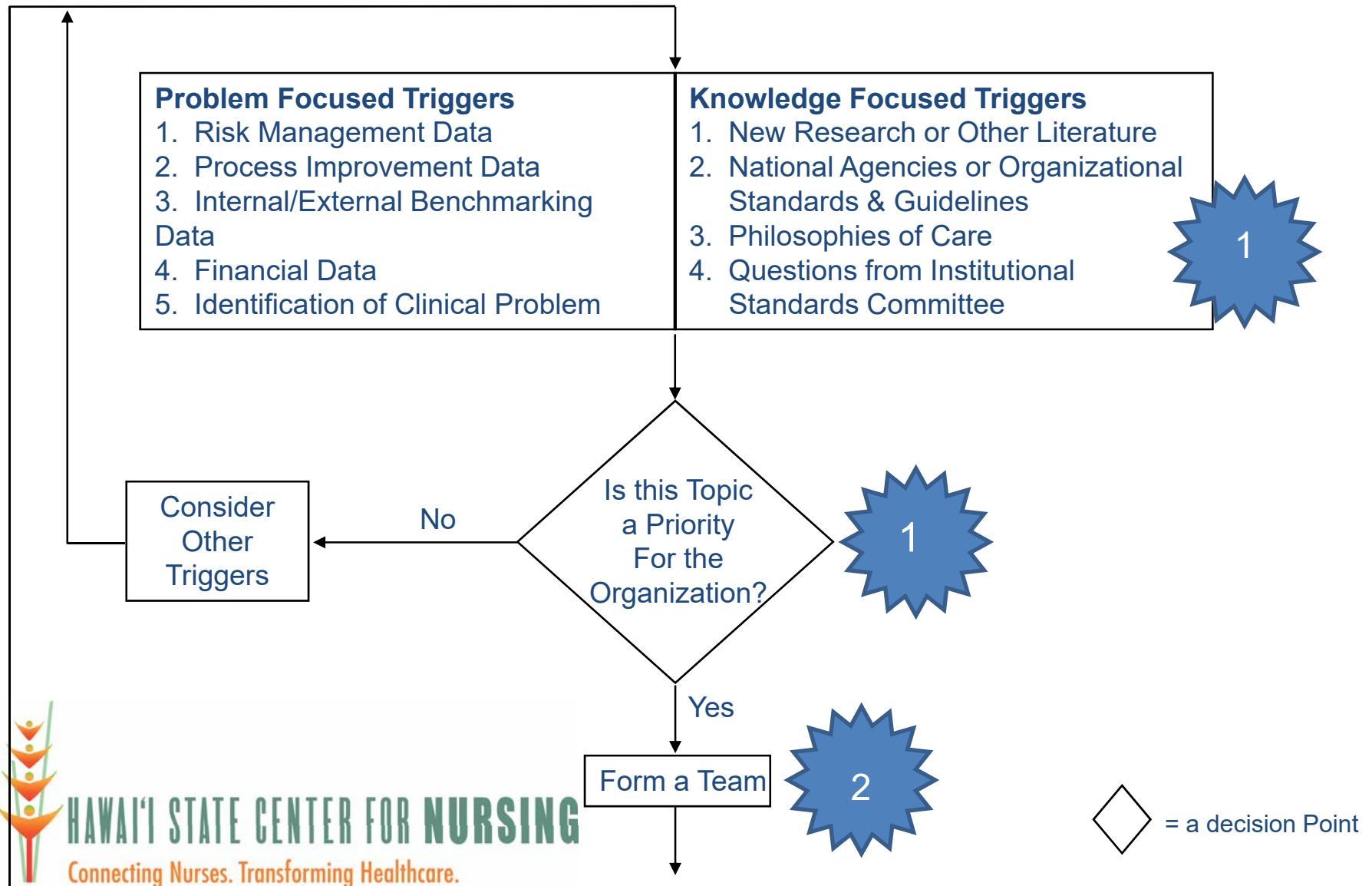
Reference

Titler, M.G., Kleiber, C., Steelman, V., Rakei, B., Budreau, G., Everett, L.Q., Buckwalter, K.C., Tripp-Reimer, T., & Goode C. (2001). The Iowa Model of Evidence-Based Practice to Promote Quality Care. *Critical Care Nursing Clinics of North America*, 13(4), 497-509.

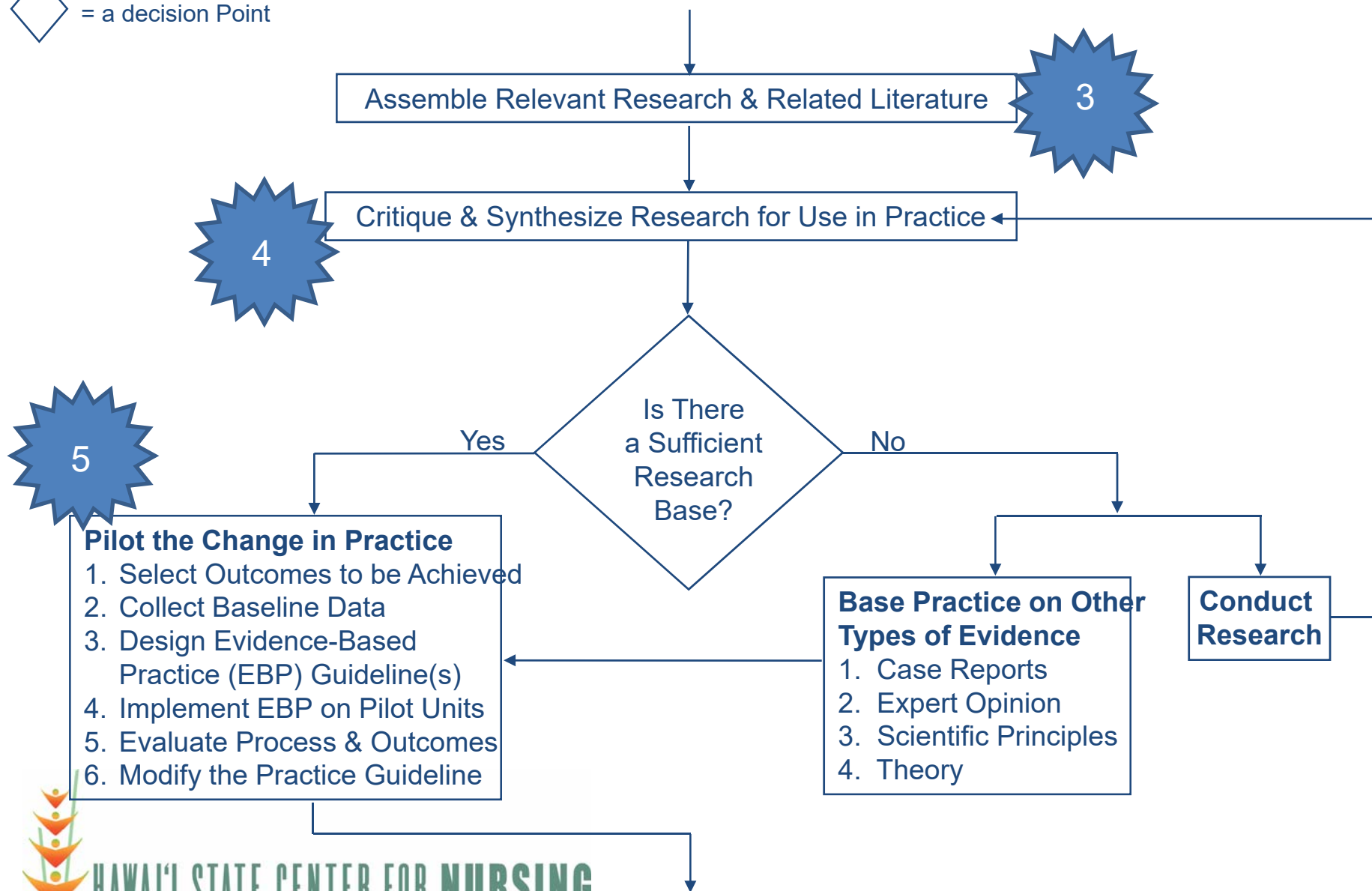
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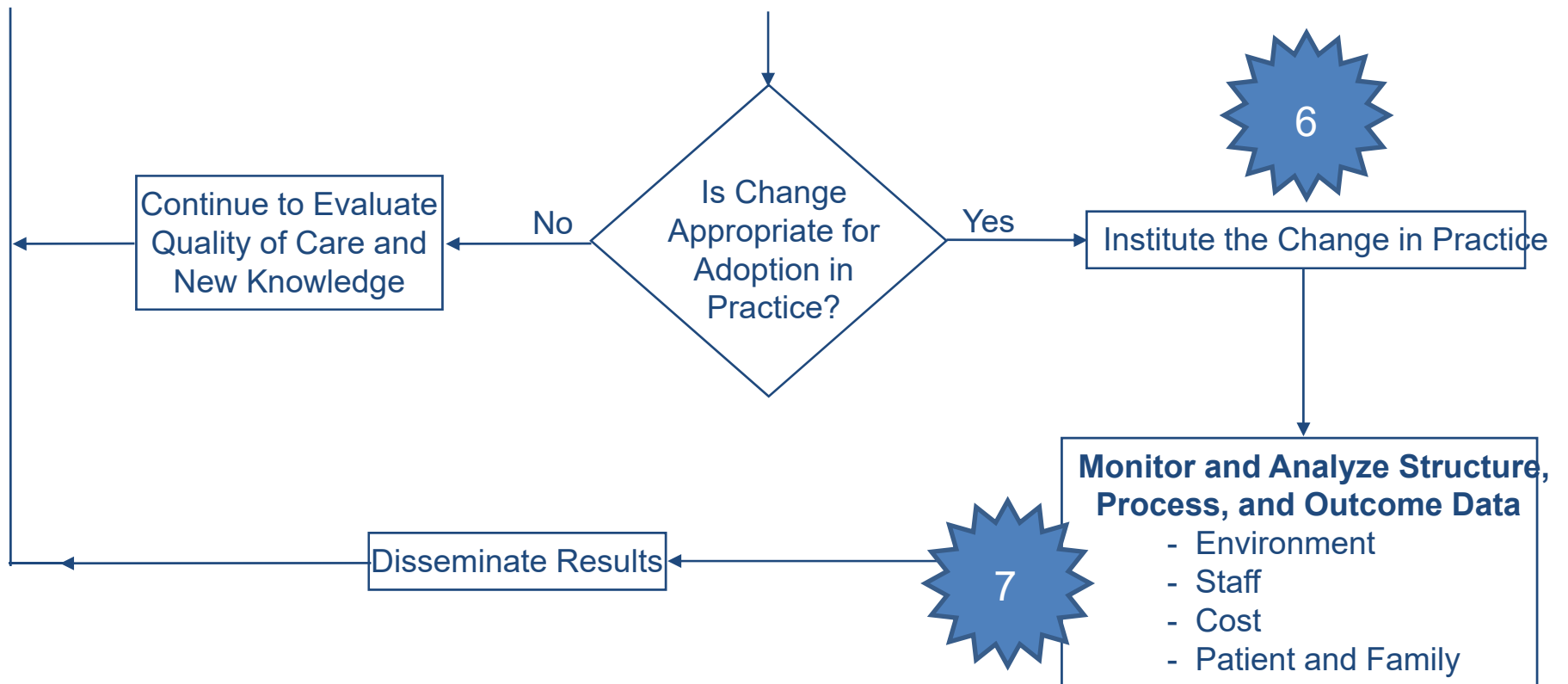
REQUESTS TO:
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Revised April 1998 © UIHC

The Iowa Model of Evidence-Based Practice to Promote Quality Care



◇ = a decision Point





◊ = a decision Point

Statewide EBP Workshops

The Center offers three EBP statewide workshops

Clinician

Manager

Educator



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Clinician EBP Workshop & Internship

- Annual clinician EBP 2-day workshop
 - focus is for clinical nurses
 - educates nurses on the meaning, importance, and methods of EBP in healthcare settings
 - is followed by a 12-month internship that reinforces content and facilitates project implementation



Manager EBP Workshop

- The biennial nurse manager workshop demonstrates the value of EBP to quality care efforts and professional development of frontline staff
 - Focus is for nurse managers
 - Developed in response to the realization that clinician teams needed more support in their institutions
 - Institutional ROI focused
 - Offered before clinician workshop to generate support
 - Focuses on unit, organizational, and product line strategies

Educator EBP Workshop

- The biennial educator workshop facilitates integration of EBP content in undergraduate and graduate curricula
 - Focus is for Nursing faculty to develop strategies to integrate EBP into curriculum
 - EBP Champions



Topics

- Accidental Extubations
- Advanced Care Planning
- Aggressive Behavior
- Agitation in Intubated Patients
- Alternative Therapy for Pain Control
- Ambient Noise Levels
- Childbirth Education
- Conscious Sedation Safety
- Falls
- Hand Hygiene Compliance
- Heart Failure
- Hospital Discharge Instruction
- Hourly Rounding for Toileting
- Late Pre-Term Infant Care
- Pain Assessment in Residents with Dementia
- Pain Control for Opioid-Dependent Patients

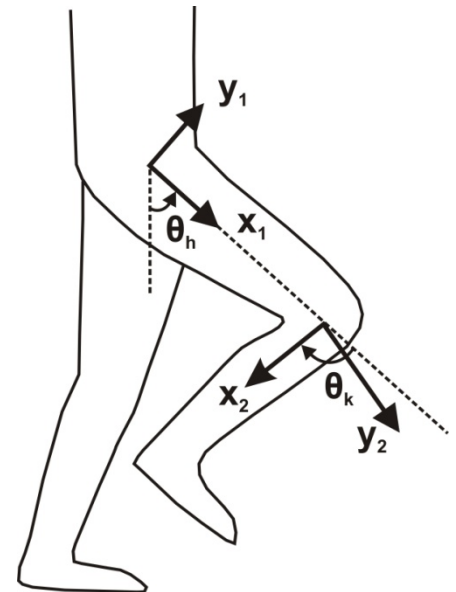
Topics

- PCA Medication Errors
- Peripheral IV Flushing
- Post-Operative Bowel Function
- Post-Operative Pelvic Abscess
- Pre-Operative Hyperglycemia
- Restraint/Seclusion Reduction
- Sepsis Screening
- Simulation Training for Medication Errors
- Simulation Training for Rapid Response
- Spinal Cord Injury Pulmonary Care
- Suicide Reduction
- Trauma Informed Care
- Vascular Access Device Selection
- Ventilator Weaning Readiness
- Wound Care

Example Clinician Project

Managing Perioperative Hyperglycemia in Total Hip and Knee Replacement Surgeries

Agos, F., Shoda, C., & Bransford, D.



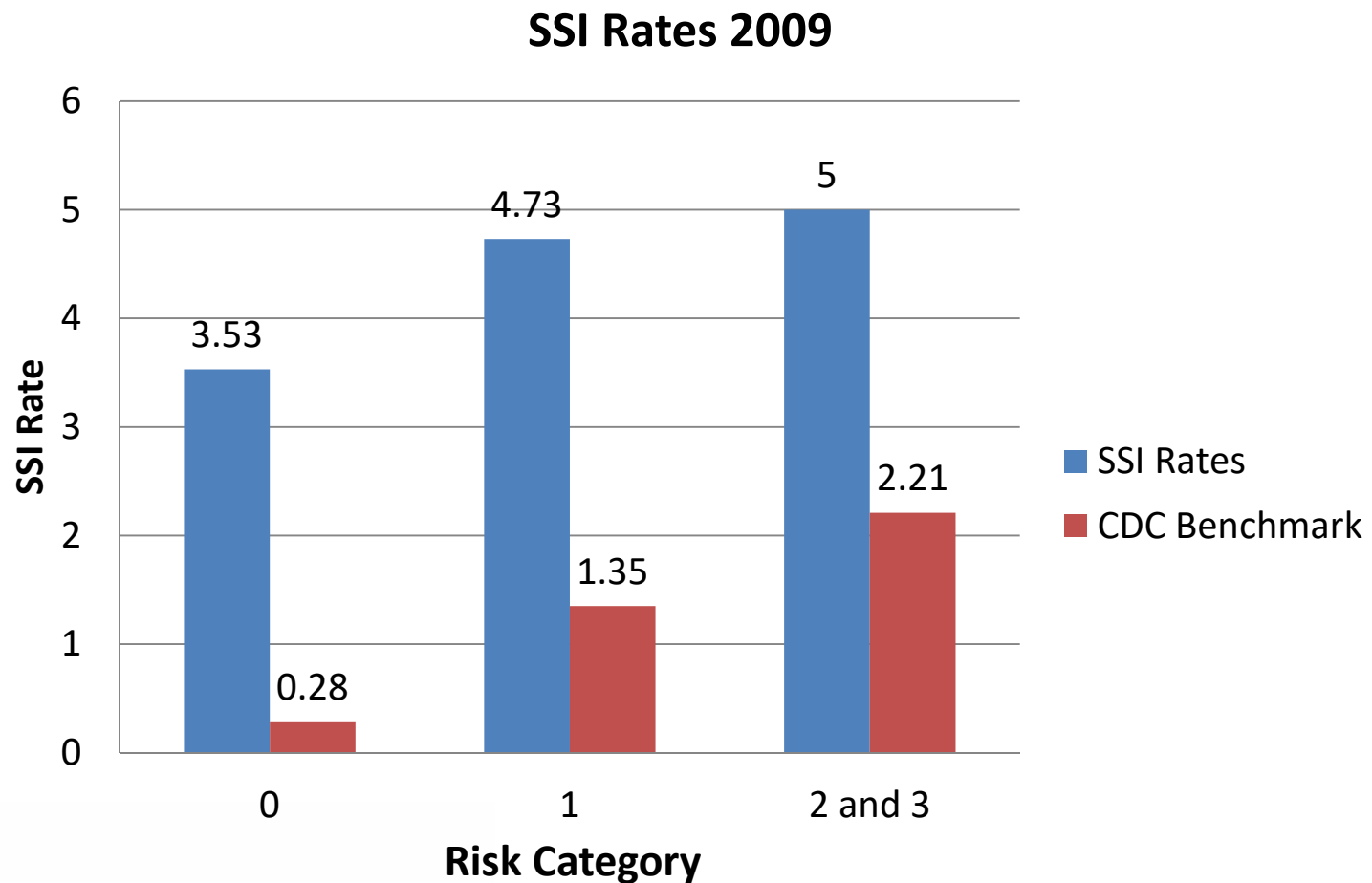
Background



Introduction

- Method
 - Evidence-Based Practice
- Conceptual Framework
 - The Iowa Model (7 Steps)
- Setting
 - Tertiary Health Care Facility
 - 24-bed Orthopedic Surgical Unit
- Target Population
 - Total Hip and Knee Replacement Surgeries

Step 1: Triggers

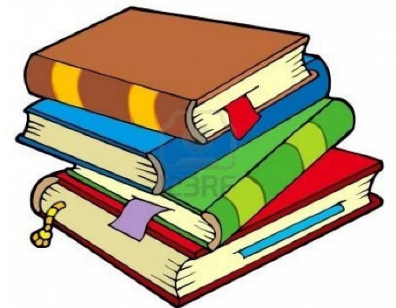


Step 2: Form a (Multidisciplinary) Team

-  **Orthopedic Staff RNs (3)**
-  **Ortho Nurse Manager**
-  **Diabetes Nurse Educator**
-  **Diabetes Pharmacist**
-  **Diabetes APRN**
-  **Dietician**
-  **Hospitalist**
-  **Endocrinologist**
-  **PI Coordinator**

Step 3: Assemble Literature

- Databases Searched
 - PubMed, CINAHL
- Years Searched
 - 2000 to 2013
- Keywords
 - Glycemic control, hyperglycemia, BG, Hg A1c, postoperative SSIs, joint replacement, etc.



Step 4: Critique & Synthesize Literature

- Patients with and without a diagnosis of Diabetes are at risk, especially first 48 hours post-op
- Pre-meal BG < 100 mg/dl
- Postprandial BG < 180 mg/dl
- Sliding Scale insulin **ineffective**
- HgA1c not important indicator – Focus on BG

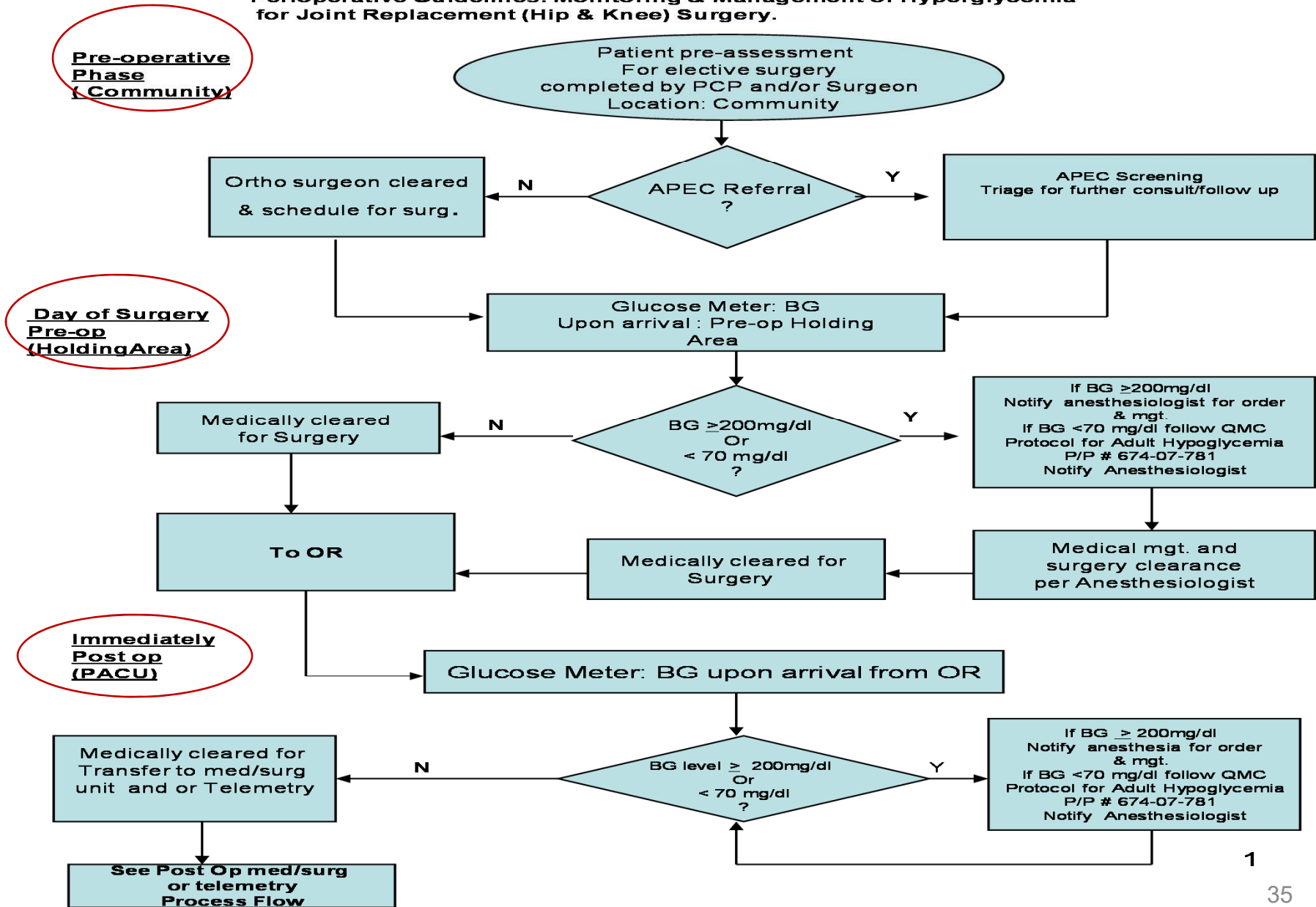


Step 5: Design & Pilot Practice Change

- Developed practice standard
 - New order set in EMR
 - Algorithm
- Education sessions for staff & patients
- Marketing
- Piloted for 3 months
 - Pre-op
 - Recovery Room
 - Post-op (Orthopedic Surgery Unit)



Perioperative Guidelines: Monitoring & Management of Hyperglycemia for Joint Replacement (Hip & Knee) Surgery.



****Provide hand off report: Latest BG; Medications received in PACU; next scheduled BG level check.**

Continuation : Peri-operative Guidelines: Monitoring & Management of Hyperglycemia for Joint Replacement (Hip & Knee) Surgery

**Post-op
(Medical/Surgical Unit,
or Telemetry
POD 0,
POD 1 & until
discharge**

Hand off report from PACU to include but not limited to:
Latest BG level; medications received in PACU;
next scheduled BG level check

Glucose Meter: BG level upon arrival from PACU and or
at next scheduled time per Physician order

Decision Diamond: BG \geq 200mg/dl or >
Or < 70 mg/dl ?

N
Continue assessment; monitoring;
Management per Physician order .

Y
If BG level \geq 200mg/dl notify physician
If BG level < 70 mg/dl, follow QMC
Adult Emergency Protocol for
Hypoglycemia, P/P # 674-07-781
Notify Physician
Obtain order for
Diabetes Education Team consult
(Evaluate & Treat)
If Type I DM obtain order for
Immediate Endocrinologist consult
(existing or on call)

Continue assessment per Physician order for BG
Monitoring & insulin regimen
For Eating & NPO patient.

Medically cleared for discharge

**Day of
Discharge**

Complete Discharge instructions, education & teaching
-Patient w/ persistent hyperglycemia and / or changes in diabetes medication regimen
-inpatient BG level results and A1c result (if available) faxed to PCP w/ standard cover sheet.
-Patient to schedule follow up w/ PCP within 1 week of discharge

PCP Follow up care & discharge
Instruction(s) completed

For questions:
Contact Edna Dasalla, RN
At edasalla@queens.org

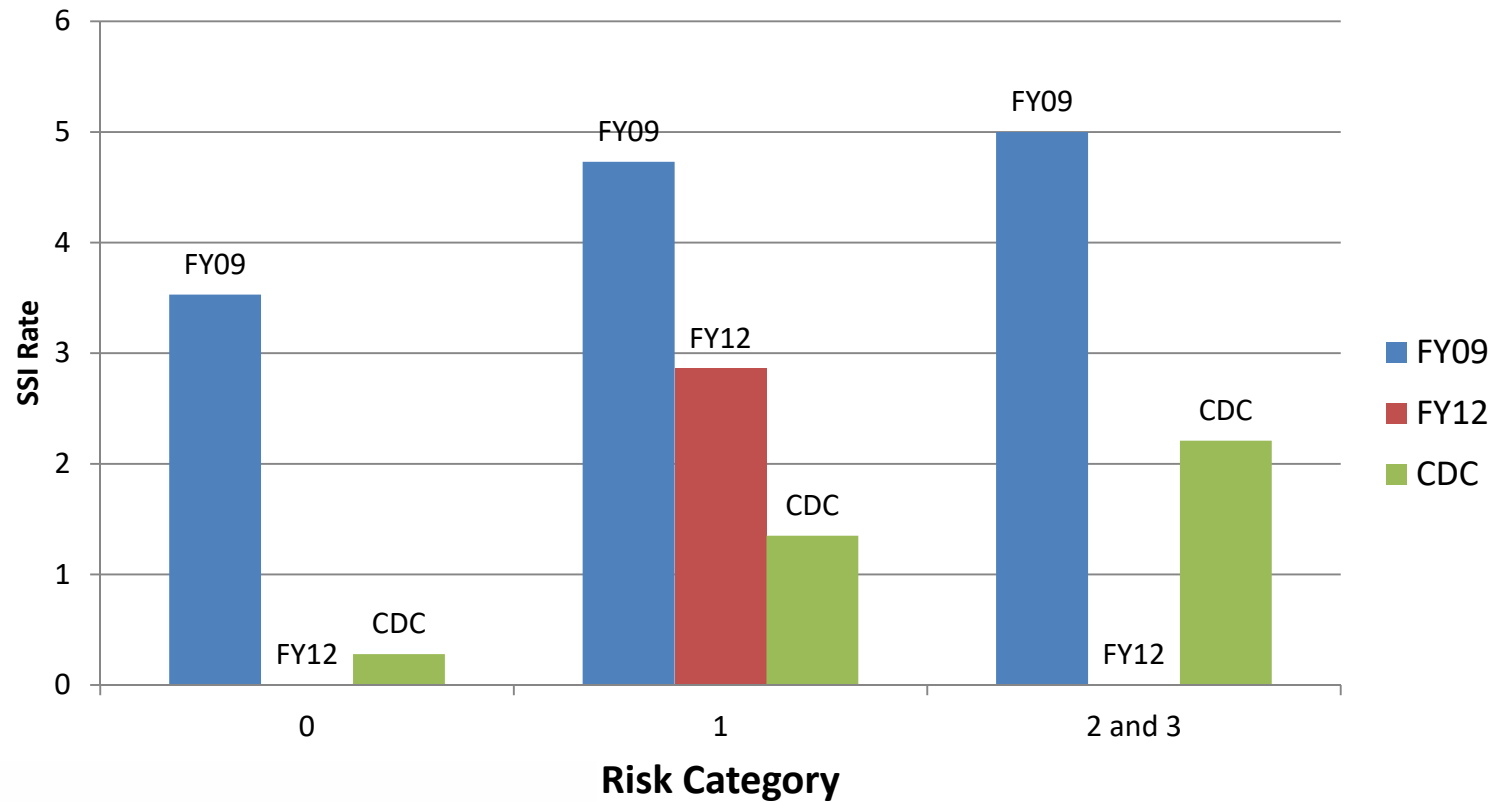
Step 6: Institute the Practice Change

- Algorithm revised
 - Increased workload for nursing staff
 - Nurse Aides trained
 - New shift start time
 - Noncompliance by surgeons & residents
 - Several reminders



Step 7: Evaluate Practice Change

SSI Rates 2009 & 2012





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Reference

- Agos, F., Shoda, C., & Bransford, D. (2014). Managing perioperative hyperglycemia in total hip and knee replacement surgeries. *Nursing Clinics of North America*, 49(3), 299-308.



Outcomes to Date

EBP Internship

18 Sites

80 Teams


211 Nurses



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Outcomes to Date



Manager
Workshop

12 Sites

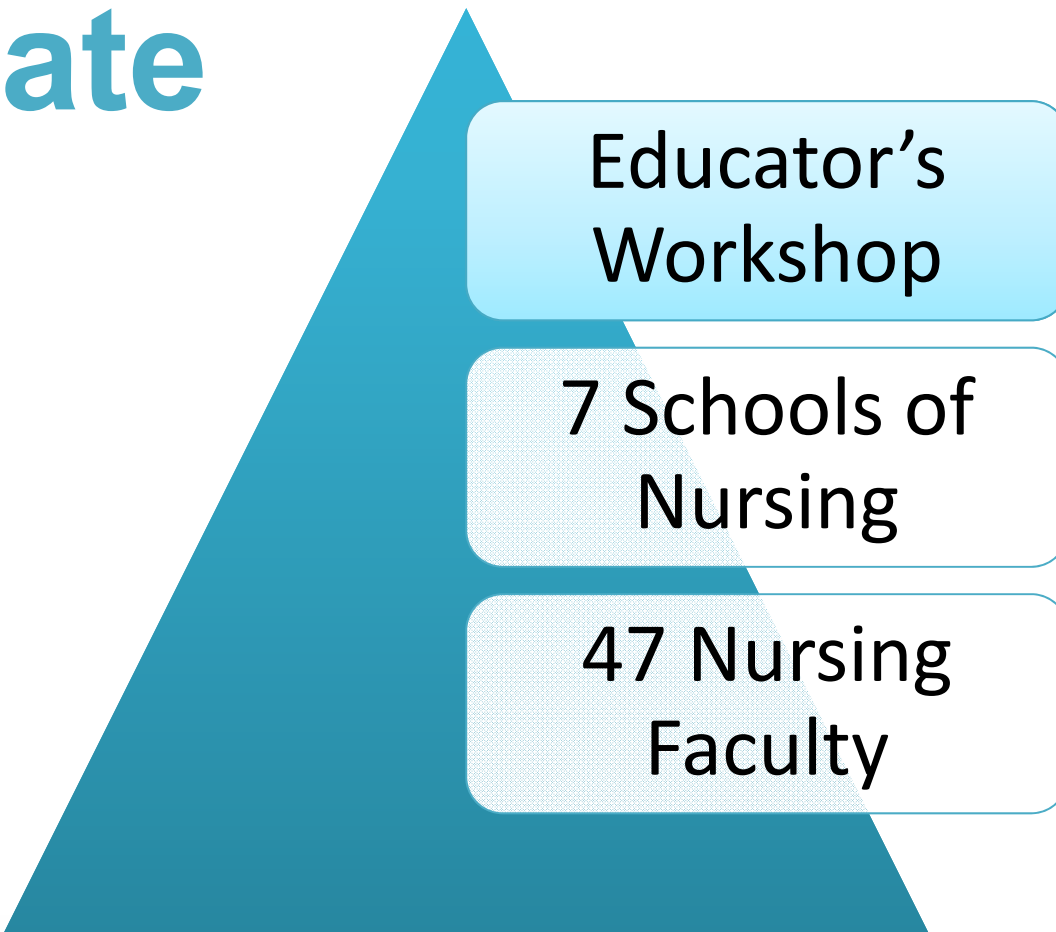
54 Nurses



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Outcomes to Date



Educator's
Workshop

7 Schools of
Nursing

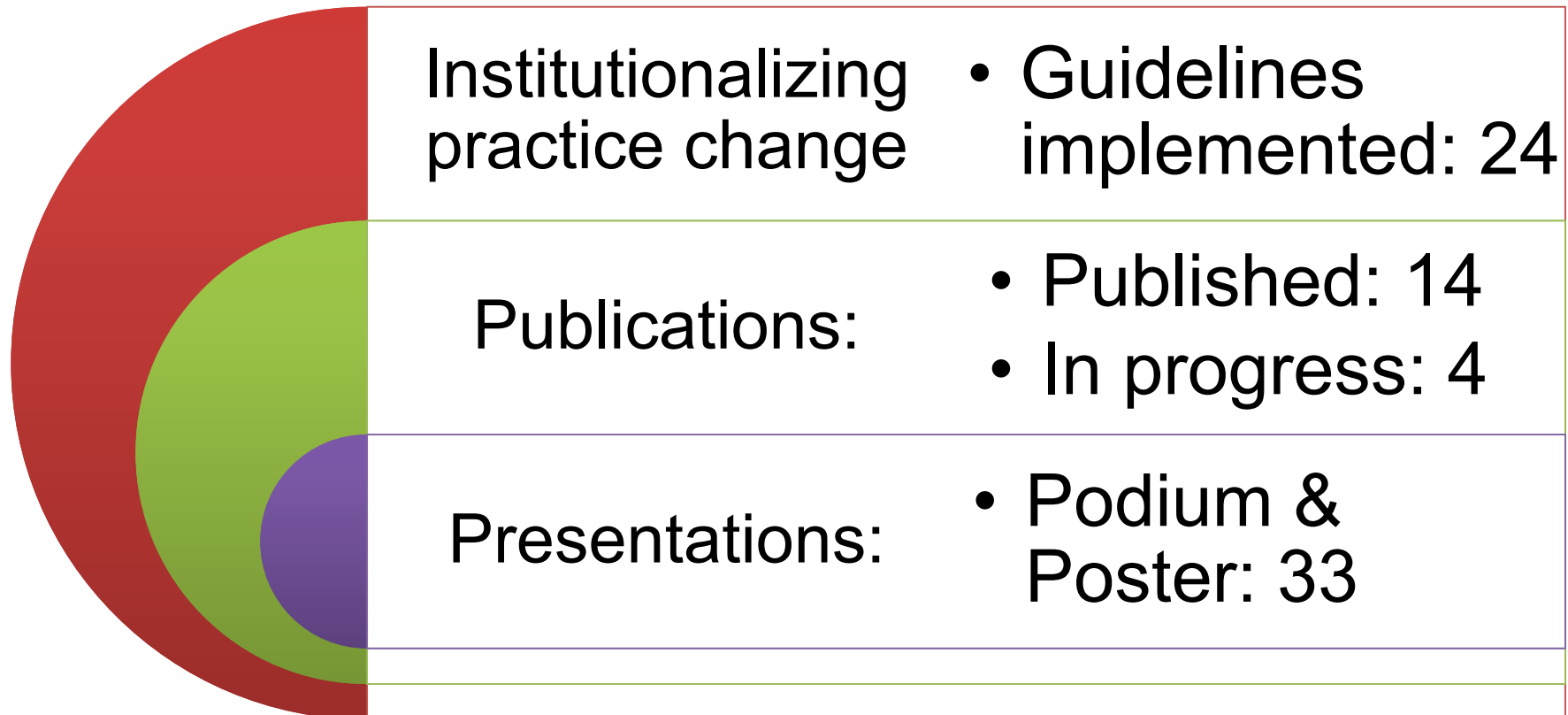
47 Nursing
Faculty



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Outcomes



Overall Outcomes

Over 300 RNs have been trained in EBP

approximately 80 EBP projects have been initiated by teams

representing 20 different healthcare organizations and nursing academic programs

Conclusions

- These workshops and internship have shown proof of **scalability** and **sustainability** at the statewide level.
- Additionally, the program **educates all nurses** so that they can apply evidence to **improve healthcare and patient outcomes at all levels.**



Unless we are making progress in our nursing every year, every month, every week, take my word for it we are going back.

- *Florence Nightingale*

Mahalo Nui Loa!

(Thank you very much!)

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