Institute *for* Healthcare Improvement

Driver Diagram Examples

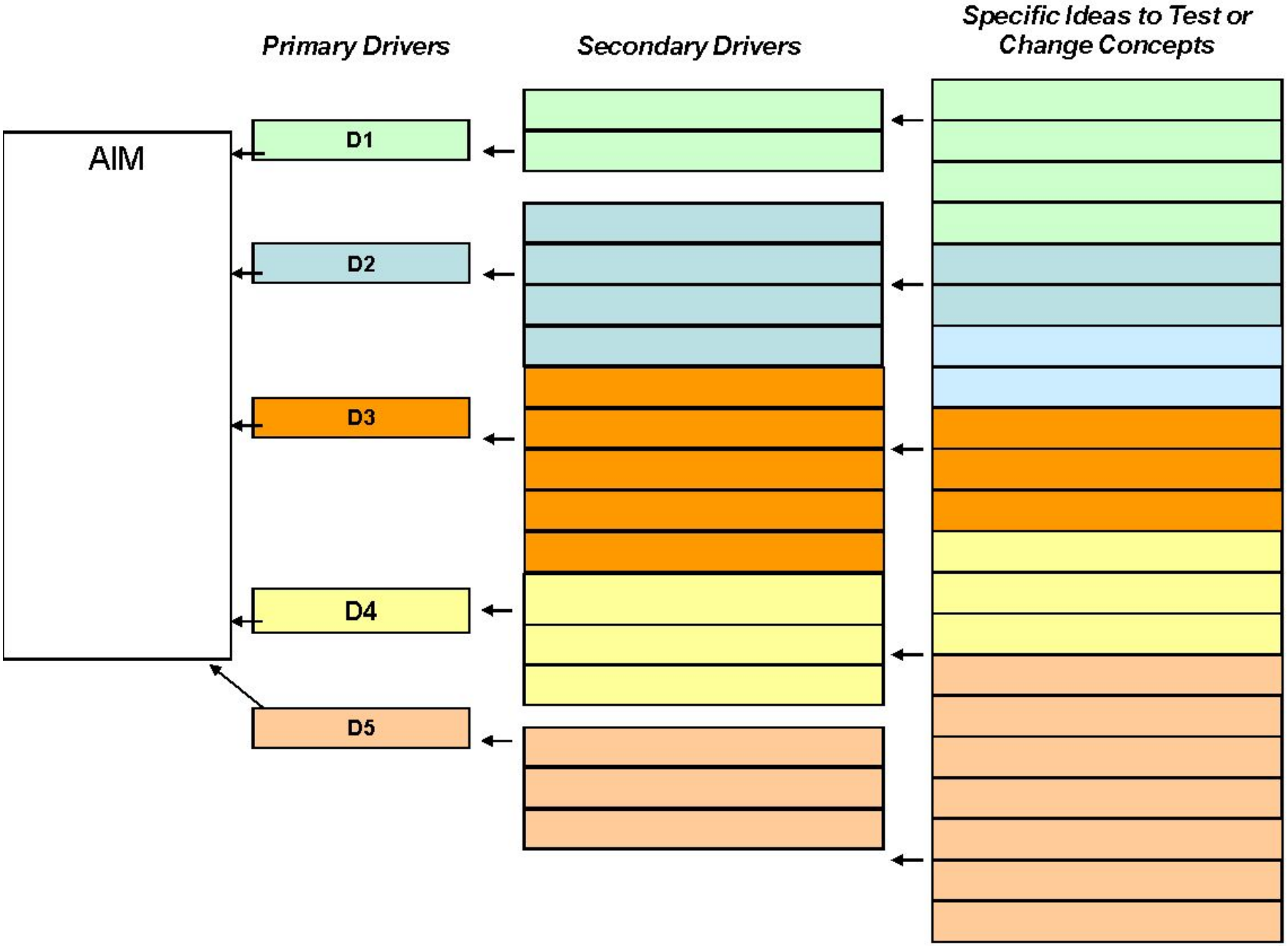
Includes Templates and Definitions



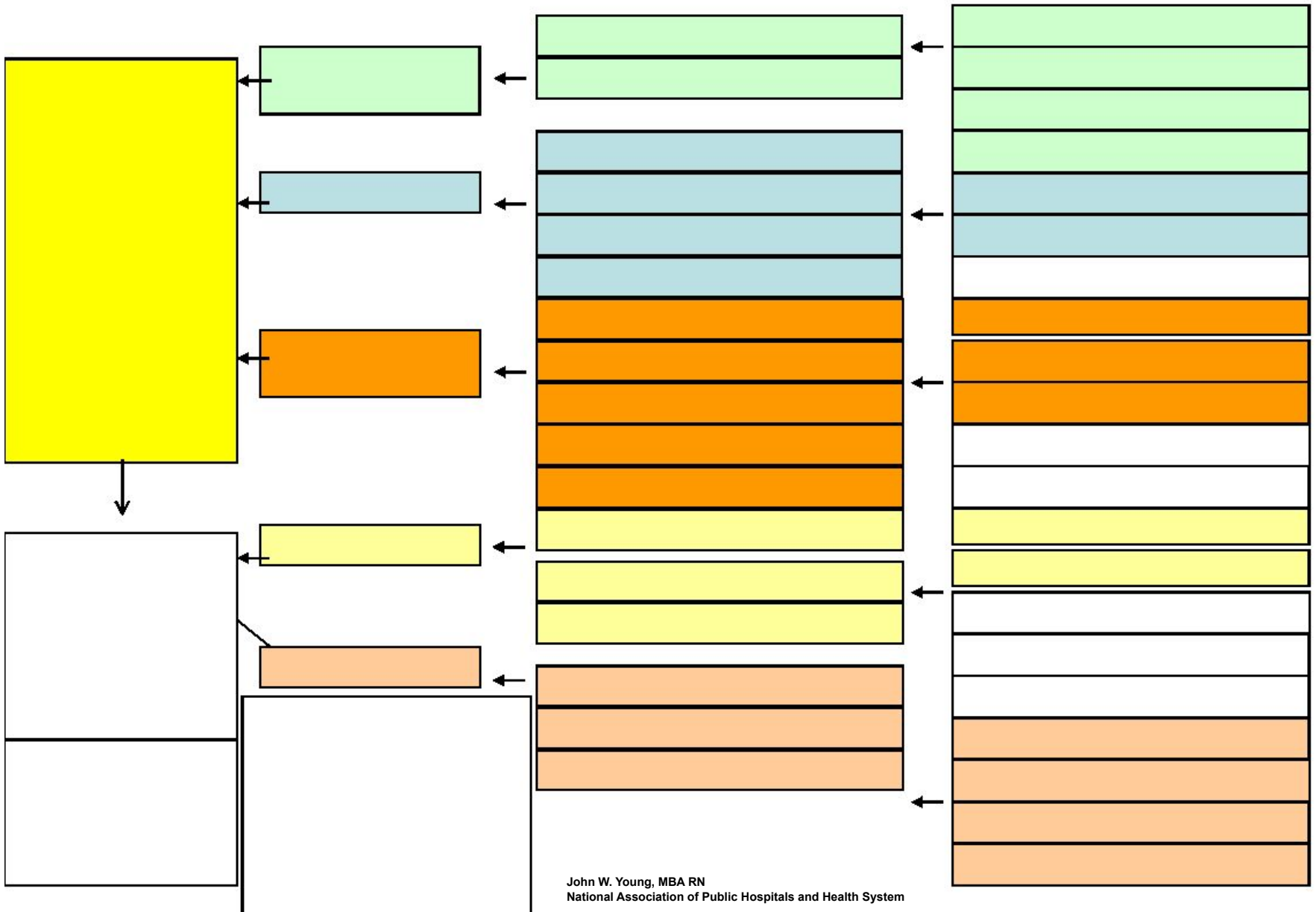
Driver Diagram Definitions:

- A Driver Diagram is an improvement tool used to organize theories and ideas in an improvement effort. It displays visually, our theory about why things are the way they are and/or potential areas we can leverage to change the status quo. The driver diagram is often used to scope or size a project and to clarify the plan for reaching the aim.
- Primary Drivers: major processes, operating rules, or structures that will contribute to moving towards the aim
- Secondary Drivers: elements or portions of the primary drivers. The secondary drivers are system components necessary in order to impact primary drivers, and thus reach project aim.
- Specific changes /Change concepts: Specific changes are concrete actionable ideas to take to testing. Change concepts are broad concepts (e.g. move steps in the process closer together) that are not yet specific enough to be actionable but which will be used to generate specific ideas for change.
  - Note: measures can be indicated on the DD as it becomes more mature.

Driver Diagram



Driver Diagram



John W. Young, MBA RN
National Association of Public Hospitals and Health System

IMMUNIZATION RATES – DRIVER DIAGRAM

Balancing Measures

- ✓ *Public perception of benefits of imms*
- ✓ *Appointment wait time*
- ✓ *Matching supply and demand*
- ✓ *Patient Satisfaction*
- ✓ *Billing ???*

AIM

Increased Immunization Rates for Targeted Population

Outcomes Measures

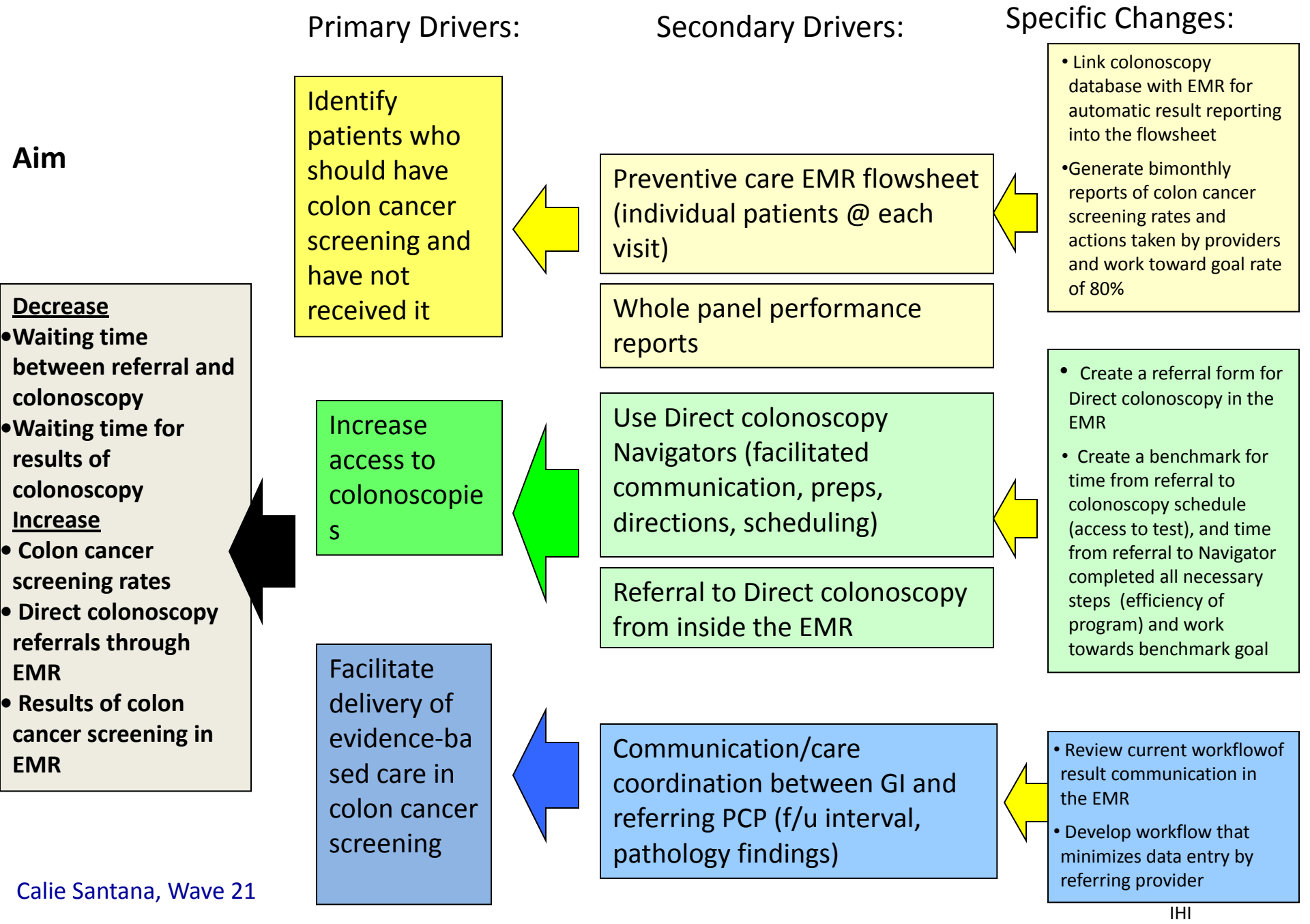
- ✓ *Number of imms*
- ✓ *Number of cases of imms preventable outbreaks*
- ✓ *Percentage immunized*
- ✓ *Comparison with national standards*

Primary Drivers	Secondary Drivers	Change Ideas to Test
Level of immunization awareness	Media coverage Problem denied Literacy level Information sources	▪ Hand out information sheets that highlight childhood immunizations to all patients coming in for any type of visit- #27 ▪ Distribute immunizations info as a part of EH community contact - #27 ▪ Provide some kind of "incentive" to parents to immunize their children (prizes, dinner for two, etc.)- #36 ▪ Use media (internet, newspaper, TV, radio) to disseminate information about immunizations - #27 ▪ Set up an immunizations information phone line with a direct dial number ▪ Review materials for literacy level and cultural appropriateness -
Availability & accessibility of immunization services	Clinic location/hours Combined services Wait time Avail of subsidized imms	▪ Increase, or make more convenient, the hours during which vaccination services are provided ▪ Coordinate vaccination services with WIC visits ▪ Deliver vaccinations in settings previously not used ▪ Reduce administrative barriers to vaccination (e.g., drop-in clinics or express lane vaccination services) ▪ Reduce distance patients must travel to receive vaccination services ▪ Do mail and/or telephone reminders
Robustness of information systems	Interfaces w other systems System driven reminders System monitors for imms System driven decisions	▪ Write standing orders for immunizations ▪ Use EPIC Immunizations Tracking Tools (in conjunction with standing orders and historical immunizations) ▪ Modify the EHR "Preference List" browser to include a sub-section specifically for ordering childhood immunizations ▪ Evaluate/beta test immunization registry interface between OCHIN and ALERT ▪ Use reporting tools to fill workflow gaps (e.g. if the EPIC workflow doesn't have useful tools for identifying late starts, write a report to fill the gap)
Design and coordination of care	Care planning & coord Communication Imms protocols Continuum of care	▪ Scrub chart prior to patient arrival and identify immunizations opportunities ▪ Use panels/huddles for communication re: immunizations ▪ Partner with other internal providers for referrals to imms (WIC, Cacoon, MH, etc.) ▪ Develop and document protocols for standing orders
Community Partnerships		

Driver Diagram Increase Immunization R
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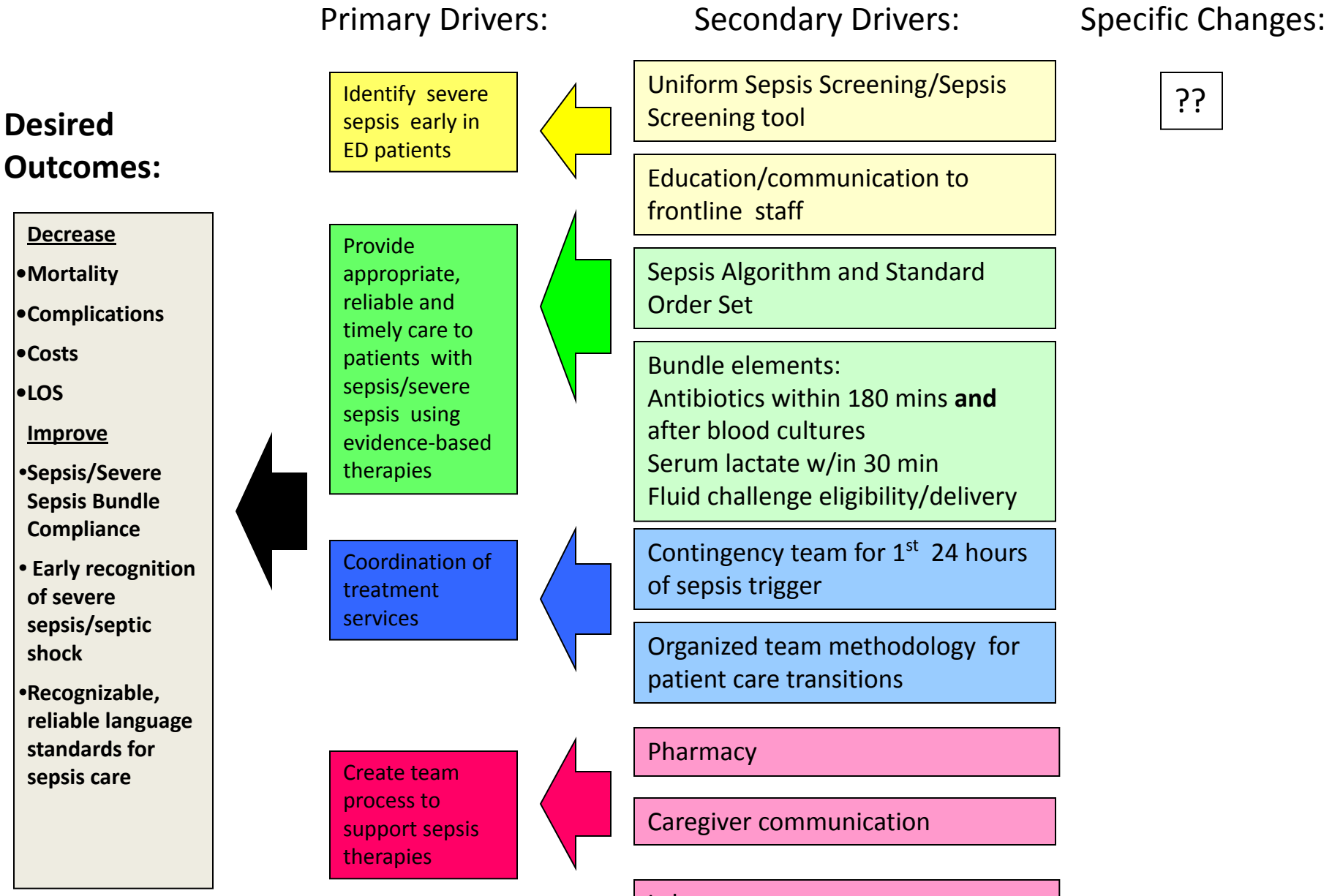
Ann Brown, Wave 23

Improving Colon Cancer Screening at Internal Medicine Faculty Practice



Calie Santana, Wave 21

Improve Severe Sepsis Care and Reduce Sepsis Mortality



Josephine Melchione, Wave 21

Aim

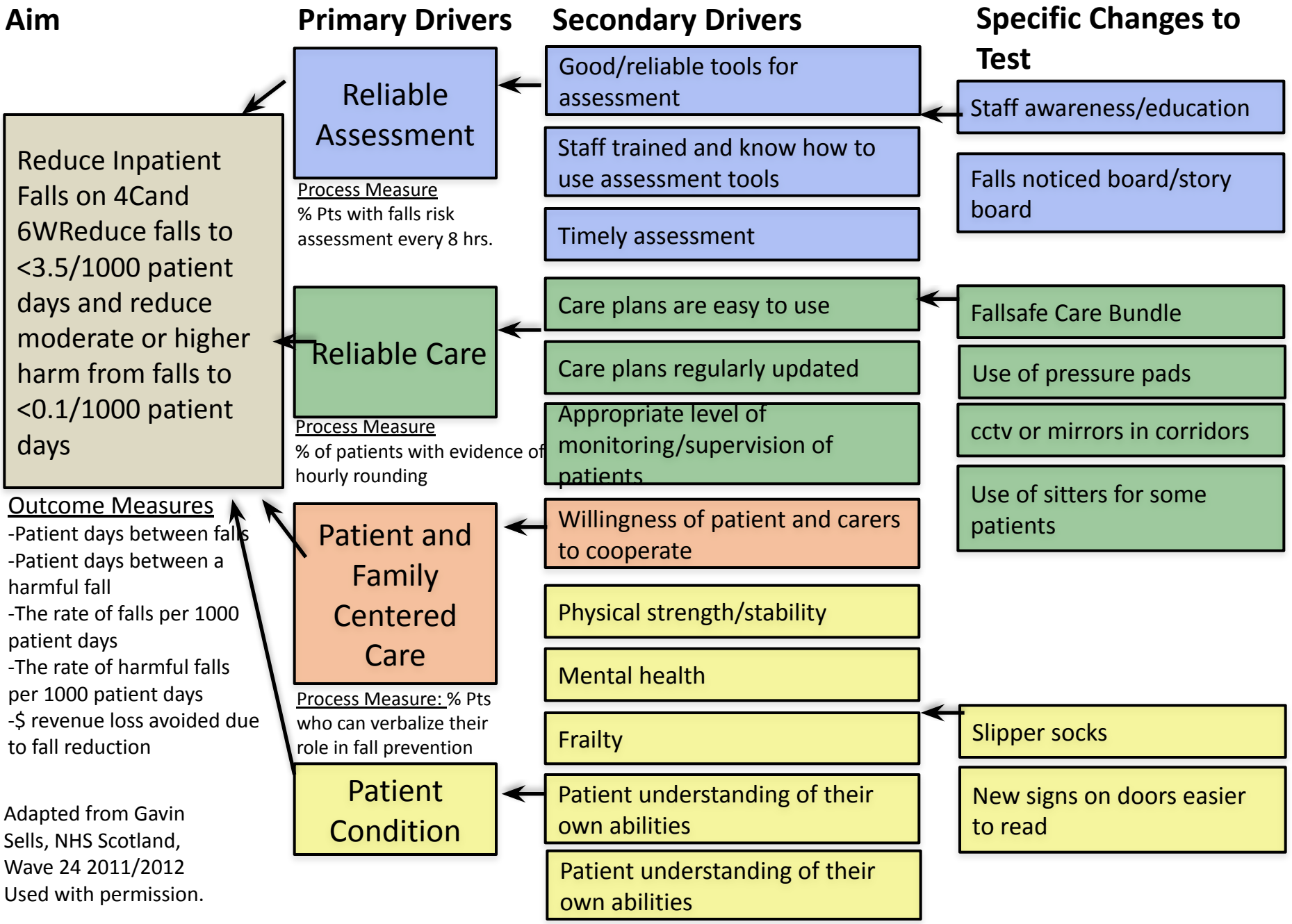
Improve

Medication compliance in stroke patients by 50%

Primary Drivers	Secondary Drivers	Change Concepts	Specific Change Ideas
Knowledge of medications	Discussing medication benefits and side effects Eliciting concerns and questions	Focus on the outcome to a customer Listen to customers Reach agreement on expectations Coach customers to use a product/service Optimize level of inspection	Script to aid discussion Shared decision making model Document decision of patient/carer SALT assessment of identify best means of communication Patient/carer satisfaction and experience of medication discussions and usage
Effective communication	Communication aids for aphasic patients Involve carers		
Medication Delivery System	For those with cognitive impairment For those with functional limitations Patient choice	Use reminders Use differentiation Use constraints Use affordances	Follow up compliance check(need to decide OPD, telephone call, home visit, questionnaire, etc) Documentation of how medications will be taken and delivered
Coordination of care	Incorporate into weekly MDT meeting Ensure medications dose, frequency, route and patient decisions stated on discharge letter to GP	Standardization Desensitize Improve predictions Develop contingency plans Manage uncertainty, not task Match amount to need	Document in case notes Document in discharge letter to GP

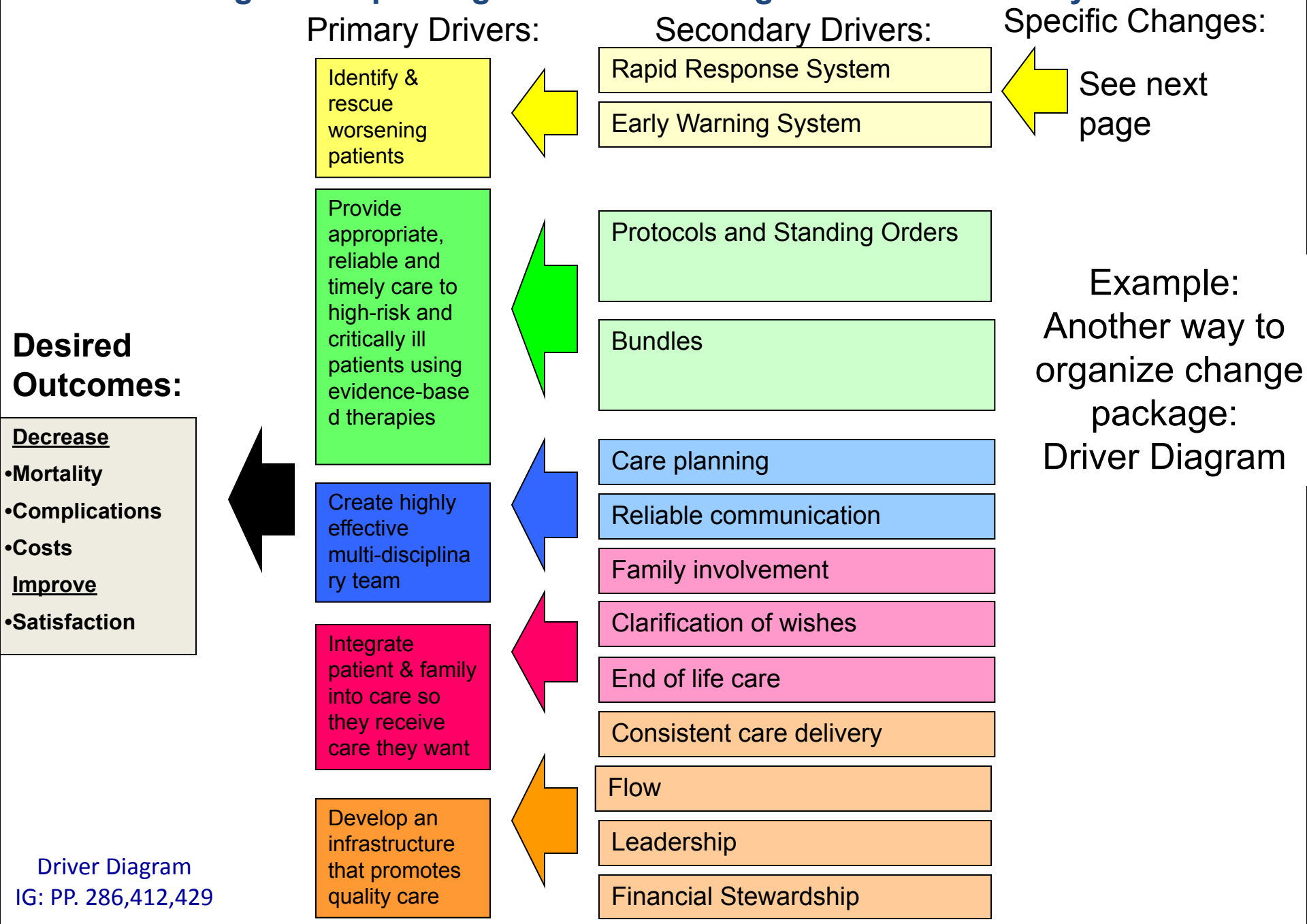
Asan Akpan, Wave 21

Driver Diagram for Reducing In-Patient Falls



Adapted from Gavin Sells, NHS Scotland, Wave 24 2011/2012
Used with permission.

Driver Diagram: Improving Outcomes for High-Risk and Critically Ill Patients



Example: Another way to organize change package: Driver Diagram

Driver Diagram
IG: PP. 286,412,429

Primary Driver	Secondary Driver	Key Change Concepts	Specific change ideas
P1. Identify & rescue worsening patients	**S1. Rapid response system**	Implement a Rapid Response Team	Standardize call criteria
			Define response team members (including a sponsor)
			Establish protocols/guidelines
			Educate units about when and how to call
			Create process to gather data about calls
			Use steering committee for development and on-going testing oversight
		Perfect triggering	Review call criteria effectiveness
			Test/Add an Early Warning System
			Review missed opportunities (e.g. unscheduled transfers to ICU)
			Work towards "goal" call rate
		Perfect responding	Develop discipline-specific criteria for team members
			Review team performance in three spheres: care provided, response time, and caller satisfaction
			Develop tool box to be brought to activations (examples: i-stat, IV tubing, lab tubes, BP cuff, documentation form)
			Do case review
			Track response time
		Perfect evaluation	Review overall process to evaluate need to improve
			Develop data tool for tracking
	S2. Early warning systems	Use objective measures to assess disease severity	Test a measurement tool such as MEWS
			Use an overall bed-board to assess layout of unit
		Create a process for use of scoring tools	Create rules for when to call RN, MD, and activate system
		Improve identification of severe sepsis	Apply the Evaluation for Severe Sepsis Screening Tool in clinical areas such as the ED, wards, and ICU
			Have nurses and Rapid Response Team complete severe sepsis screening
P2. Provide appropriate, reliable and timely care to high-risk &	**S3. Protocols and Standing Order Sets**	Develop weaning protocol	Pre-extubation worksheet