



# Medication Reconciliation: Looking Forward

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# Overview

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- Sustaining success
- Spreading within hospital units
- Reconciling across the continuum of care
- Shared electronic records



# Sustaining Success

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- How will you sustain or build upon your successes from the collaborative?
- Who will champion the project now and in the future?
- Have the new processes/procedures been “built in” to the organizational infrastructure



# Sustaining Success

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- Enroll patients as allies
- Gather evidence of effectiveness and efficiency
- Simplify processes
- Integrate processes into workflow
- Listen, be flexible, adapt
- Keep learning



# Spreading To Other Units

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- Admission
- Transfer
- Discharge
- Which patients will benefit most?
- Which units have strongest safety culture?
- Which units are in best position to engage in improvement projects?

# Reconciliation Across the Continuum of Care

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- This is the major challenge looking forward
- Depends on improved communication, coordination and cooperation
- Probably requires shared electronic medical record
- Several pilot projects underway



# Colorado Model: Care Transitions

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- [www.CareTransitions.org](http://www.CareTransitions.org)
- Personal health record
- Discharge checklist
- Transition coach (geriatric nurse practitioner) visit in hospital
- Transition coach follow up



# Colorado Model: Care Transitions

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- Case load of 24 patients per coach
- Average 28 days of post discharge follow up
- Cost \$75K per transition coach/year
- Paid for by Medicare Advantage
- Targeted to community-dwelling seniors with CHF, COPD, recent stroke or anticoagulation therapy

# The Indianapolis Model

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- Indiana Health Information Exchange ([ihie.org](http://ihie.org))
- Clinical messaging service
  - Lab/pathology, EKG, radiology, ED and hospital encounter info, transcriptions
  - Email, fax, download into local database
- 18 hospitals in central Indiana



# The PeaceHealth Model (Oregon)

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- Redesign outpatient visits around a co-edited medication list
- Use SharedCarePlan to share medication list between providers
- [www.SharedCarePlan.org](http://www.SharedCarePlan.org)
- [www.patientpowered.org](http://www.patientpowered.org)



# PeaceHealth Design Principles

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- The ambulatory med reconciliation process and tools to support the process will be designed to increase safety for patients.
- Patients and caregivers will be actively engaged in the med reconciliation process.
- Patients will be provided the tools to be more activated in their medication management (knowledge, skills, confidence).



# PeaceHealth Design Principles

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- Changes to the med list will be adequately documented and available to those who need to know.
- The patient ultimately owns the med list.
- Create the ability to link meds to problem list/diagnosis.

# PeaceHealth Design Principles

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- Comply with regulatory requirements to prevent ADE's (e.g. JCAHO, CMS, NCQA, etc.).
- There will be synergy/compatibility between inpatient and outpatient med reconciliation processes and the tools to support those processes.
- Med list information must be easily accessible to those who need to know.



# PeaceHealth Design Principles

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- Medication list(s) from various data sources (other practices, pharmacies, etc) will be available just-in-time to patients and providers.
- The med reconciliation process and tools to support are easily transferable to other PH ambulatory clinics.
- We will continuously evaluate new processes and tools to improve med reconciliation in the ambulatory setting.

# PeaceHealth Ambulatory Encounter

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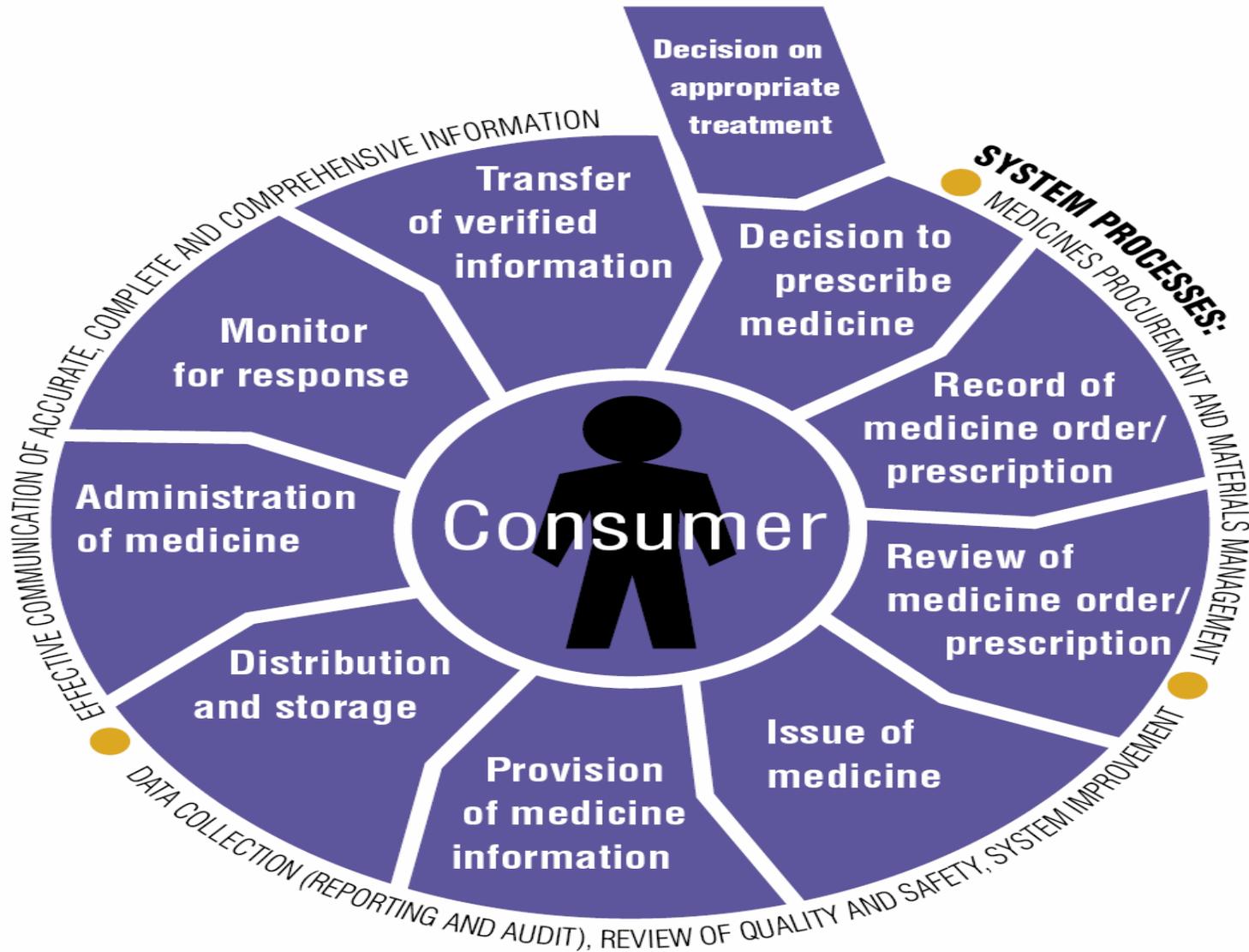
- Every patient with an encounter at a PeaceHealth ambulatory clinic will experience the following:
  - They will be asked to provide a list of their current medications (including prescribed, OTC, herbals, neutraceuticals).
  - Clinic personnel will review the med list with the patient or their representative.
  - The patients' med list and EMR med list will be reconciled and documented in RxPad.
  - Any new med orders will be checked for interactions/conflicts with an updated, reconciled med list in RxPad.
  - The patient will leave the ambulatory clinic encounter with a paper copy of the updated, reconciled med list.

# Australian Model

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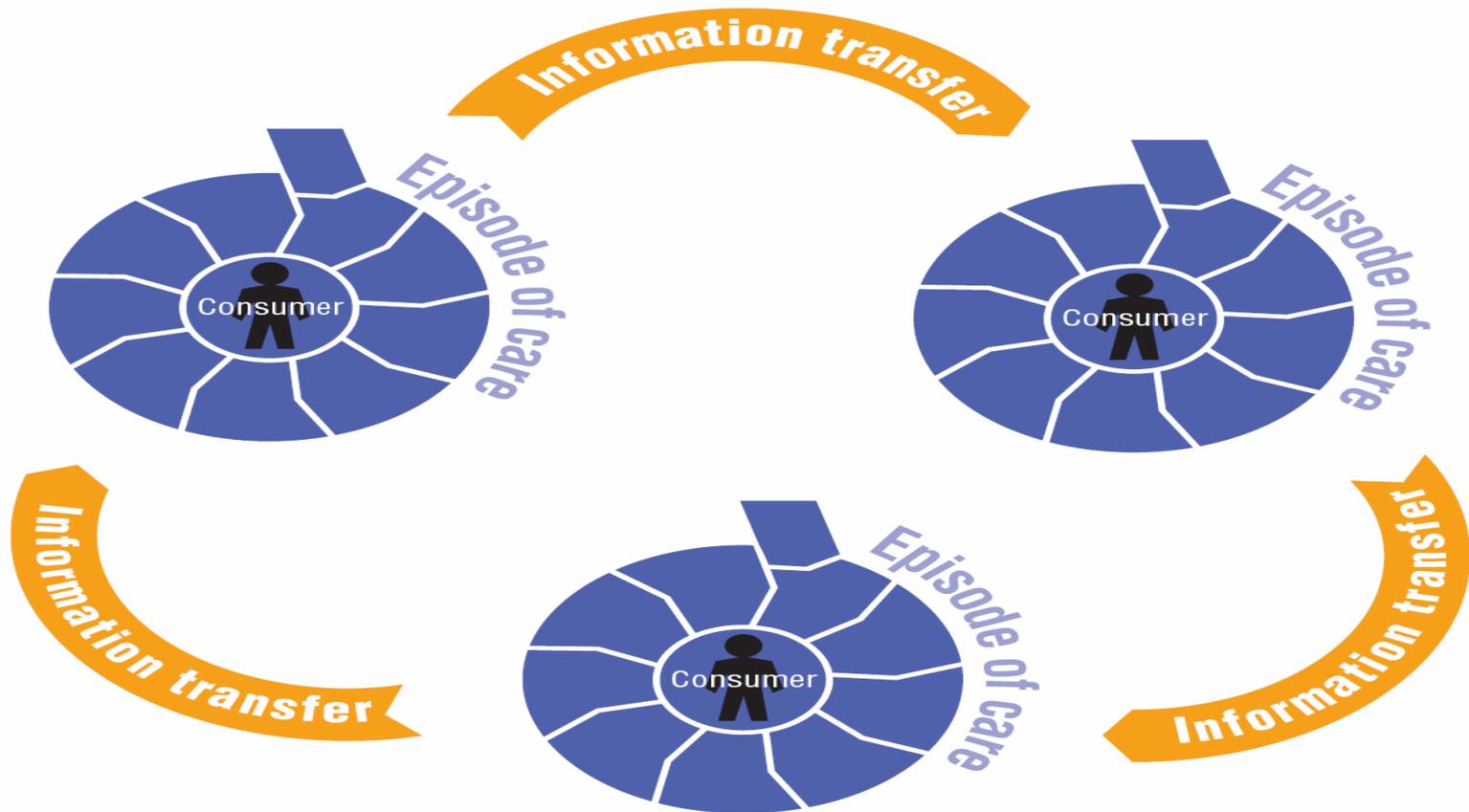
- Australian Pharmaceutical Advisory Council
- First Draft in 1998, revised draft 2005
- <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/nmp-guiding>

# The medication management cycle



# Information transfer between episodes of care

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# Australian Guiding Principles

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- Guiding Principle 1 – Leadership for medication management
  - Health service managers should provide leadership to ensure that the systems exist and resources are provided to enable medication management across the continuum of care.
- Guiding Principle 2 – Responsibility for medication management
  - Health service managers and health care professionals have a responsibility to participate in all aspects of medication management in partnership with consumers and/or their carers.

# Australian Guiding Principles

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- Guiding Principle 3 – Accountability for medication management
  - Health service managers and health care professionals are jointly and individually accountable for making sure that activities to support the continuity of medication management are implemented.
- Guiding Principle 4 – Accurate medication history
  - An accurate and complete medication history should be obtained and documented at the time of presentation or admission, or as early as possible in the episode of care.

# Australian Guiding Principles

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- Guiding Principle 5 – Assessment of current medication management
  - From the early stages and throughout each episode of care, current medicines and other therapies should be assessed to ensure the quality use of medicines, which means selecting management options wisely, choosing suitable medicines if a medicine is considered necessary, and using medicines safely and effectively.
- Guiding Principle 6 – Medication Action Plan
  - A Medication Action Plan should:
    - be developed with the consumer and relevant health care professionals as early as possible in the episode of care; Form an integral part of care planning for the consumer; and Be reviewed during the episode of care and before transfer.

# Australian Guiding Principles

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- Guiding Principle 7 – Supply of medicines information to consumers
  - Before consumers transfer to another health care provider, they and/or their carers will receive sufficient information, in a form they can use and understand, to enable them to safely and effectively use all medicines in accordance with the agreed Medication Action Plan.
- Guiding Principle 8 – Ongoing access to medicines
  - Consumers and/or their carers should receive sufficient supplies of appropriately labelling medicines (with the active ingredient and brand name displayed) and information about how to obtain further supply of medicines to support their Medication Action Plan.

# Australian Guiding Principles

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- Guiding Principle 9 – Communicating medicines information
  - When a consumer is transferred to another episode of care, the transferring health care provider/s should supply comprehensive, complete and accurate information to the health care provider/s responsible for continuing the consumer's medication management in accordance with their Medication Action Plan.
- Guiding Principle 10 – Evaluation of medication management
  - The transferring health care provider is responsible for evaluating the extent to which continuity of consumers' medication management has been achieved.



# SureScripts Medication History

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- Will deliver retail medication history by late 2006
- Will initially partner with CMS e-prescribing pilot studies
- Will adhere to RxHub/NCPDP medication history standard
- Will try to integrate across major chains

# KatrinaHealth.org

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- [www.katrinahealth.org](http://www.katrinahealth.org)
- Secure, online shared medication record for Katrina evacuees
- AMA, NCPA, and SureScripts provide authenticating information
- Merger of many (150+) large databases
- Created in 3 weeks!!

# CPSF Regional Medication Safety Initiative

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- Project funded by Michael Reese Health Trust (Lambert/Schiff PIs, under CPSF)
- 2-year planning grant started January 2005
- Year 1: build team, plan pilot, invitation only meeting, open meeting
- Year 2: execute pilot and plan for future



# Long-Term Objective

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- To improve the safety of the drug use process by creating better communication linkages between community pharmacies, hospitals and outpatient physician offices.

# Specific Aims

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- To bring together a planning group of consumers, community pharmacies and pharmacists, office-based clinicians, and hospital-based clinicians to identify the highest priority challenges and opportunities with regard to medication reconciliation
- To enroll at least one solo practitioner, one primary care group practice, one hospital and one community pharmacy in our medication reconciliation demonstration project

# Specific Aims

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- To implement locally-defined, boundary-spanning, best practices for reconciliation among these participants
- To evaluate the success of the planning effort
- To seek funding for a larger scale demonstration of the successful practices

# Defragmenting Drug Therapy

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- Not having an accurate list of a patient's current medications is not the problem---it is a symptom
- The underlying disease is fragmentation
- Medication reconciliation is symptomatic treatment---a band-aid
- Real treatment would attack fragmentation

# Who Will Take Responsibility?

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- Someone in the patient's life has to take responsibility to coordinate and oversee the drug therapy. Put your name to it. Manage uncertainty. Whom to contact?
- Who is going to take responsibility? Short of a dedicated professional, how do we manage this in such a fragmented system?
- Responsibility likely to be a shared between PCP and pharmacist.

# How many patients can one provider handle?

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- Answer is a function of the number of providers, patient's acuity, level of involvement and cognitive capacity not just number of meds or number of diagnoses.
- One person can do perhaps 2 patients per day if we mean high level reconciliation

# Levels of Reconciliation

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- What are they on?
- Why are they on it?
- What did they stop and why?
- Matching, comparison, and organizing
  - Sort by indication
  - Sort by pharmacologic category
  - Match with problem list
- Why are they in the hospital?
  - Is this best treated by drug therapy?
  - Could lifestyle do the trick?

# Levels of Reconciliation

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- Appropriateness of drug therapy?
- Reconciling for renal/hepatic function?
- Reconciling with formulary
- Reconciling with clinical guidelines
- Reconcile with other lab results
- Reconcile with individual personal experience
- Reconciling past with present (what drugs have they failed on?)

# Levels of Information Need

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- Type and extent of information need depends on level of reconciliation being attempted
- “Merely” getting an accurate list (i.e., “first-order reconciliation”) is hard enough and often not achieved
- Our designs should keep in mind the higher levels of reconciliation

# Is “Reconciliation” the Right Term?

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- Medication coordination
- Medication therapy management (a la new Medicare benefit)
- Managing regimens not prescribing drugs
- Medication rationalization
- Avoiding the slippery slope

# Nodes in the Continuum of Care

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- Home
- Hospital
- Outpatient Pharmacy
- Outpatient physician office
- Others
  - Rehab, long term care, social work, prison, nutritionist, PT, OT, etc., etc.

# 4 Nodes Yield 12 Interfaces

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- Patient contacts hospital
- Hospital contacts patient
- Patient contacts pharmacy
- Pharmacy contacts patient
- Patient contacts outpatient clinic
- Outpatient clinic contacts patient
- Hospital contacts outpatient pharmacy
- Outpatient pharmacy contacts hospital
- Hospital contacts outpatient clinic
- Outpatient clinic contacts hospital
- Pharmacy contacts outpatient office
- Outpatient clinic contacts pharmacy



# Complexity Within Nodes

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- Each “geographic” node has its own internal complexity
- In the home there is the patient and the caregivers
- In the pharmacy there are multiple pharmacists and technicians
- In the hospital there are multiple MDs, RNs, PharmDs and others
- In the outpatient clinic there are receptionists, nurses, and MDS

# Summary

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- Sustain and spread success within your own hospital/system
- Extend reconciliation efforts across the continuum of care
- Plan to join and collaborate with community-wide shared medical records and other forms of health information exchange efforts