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# Designing a Perfect Integrated System (!)

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## Overview

- What are we trying to accomplish?
- How are we proposing to do this?
- What is a care plan?
- How should an idealized care plan function?
- How might care planning systems evolve?
- What might an idealized care plan look like?
- What are some issues that need to be addressed?

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## What are we trying to accomplish?

- Support patients in articulating and achieving health goals
- Improve outcomes and cost – individual and population

## How are we proposing to do this?

- Our primary hypothesis is that patients generally can't do this without one or more of the following forms of support:
  - A care plan
    - To make explicit their goals and actions that support them
    - To track their progress toward goals and in implementing supportive actions
  - A care manager
    - To help them create and implement a care plan
    - To coordinate support resources
  - Medical services
    - To provide needed diagnostic, pharmacologic, surgical, physical, educational support
  - Mental health/behavioral services
    - To provide diagnostic, pharmacologic, individual/group counseling support
  - Social services
    - To provide programmatic, financial, and other resources
  
- Our secondary hypothesis is that the above support cannot be effectively and efficiently provided without a technical infrastructure that facilitates it

## What is a care plan?

- Minimally, as in the proposed Meaningful Use Stage 2 rules, a care plan includes goals, problems, actions
- Content of these components is not specified. For a primary care- based plan:
  - Goals
    - Patient health-related goals, in patient language: “Less pain” “Able to dance at my child’s wedding” “Able to work again”
    - Intermediate goals, necessary to attain health goals, defined by the patient and the care manager: “10 pound weight loss” “Climb a flight of stairs” “Blood pressure control”
  - Problems
    - Medical: diagnoses
    - Mental health/behavioral: diagnoses, behaviors
    - Social: resource needs
  - Actions
    - Of the care manager
    - Of the health care, mental/behavioral, social service providers
    - Of the patient
- There may be other potential types of care plans, such as:
  - Specialty care
  - Post discharge
  - End-of-life

## How should an idealized care plan function? A case scenario

- Conventional medical case summary/plan:
  - JQ is a 49 y.o. male who presents in follow up to an ER visit for chest pain in which there was no evidence of acute ischemia
  - Current medical problems include HTN, and hyperlipidemia
  - Meds: lisinopril 10 mg/day
  - Social history: Lost his job in construction 2 years ago, separated from spouse 1 year ago. Generates some income as a handyman. Non-smoker, daily ETOH.
  - ROS: difficulty sleeping, anxiety accompanied by non-exertional chest pains
  - Exam: BMI 35, BP 150/100, otherwise unremarkable
  - Assessment: HTN, hyperlipidemia, obesity, chest pain – probably functional, depression
  - Plan: increase lisinopril dose, dietitian consult, SSRI

## Case scenario – care managed/patient-centered plan

- Patient goals:
  - Get a job
  - Feel better: less lonely, anxious
  - Avoid chest pains
- Assessment:
  - Patient at risk for poor outcomes and costly care: ED visits, hospitalization, ischemic vascular disease, ETOH abuse/complications
  - Depression/anxiety is in part secondary to job and relationship loss
- Plan:
  - Assess needs/eligibility for financial assistance, job counseling/retraining
  - Refer for mental health/behavioral services; individual or group-based services that include holistic approach to diet and depression
  - Create a care plan reflecting above and track follow through
  - Revise care plan and coordinate care based on assessments and interventions of social service and mental health providers

## Case scenario – care coordination and keys to success

- Social services/mental health services/primary care information exchange
  - What is the care manager requesting support for?
  - What social services programs is the patient enrolled in and what do they provide?
  - What social services programs is the patient eligible for but enrollment is pending, and what will they provide?
  - What social services programs is the patient not eligible for?
  - What is mental health services is the patient receiving?
  - Is the patient reliably attending mental health appointments?
  
- Keys to success in this case:
  - PCP has care manager to help with care planning and coordination with other providers and patient
  - Care manager has infrastructure to make care planning and coordination effective and efficient
  - Patient has access to social service and mental health/behavioral support
  - Patient has access to care plan and reinforcement for behavior change



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## How should an idealized care plan function?

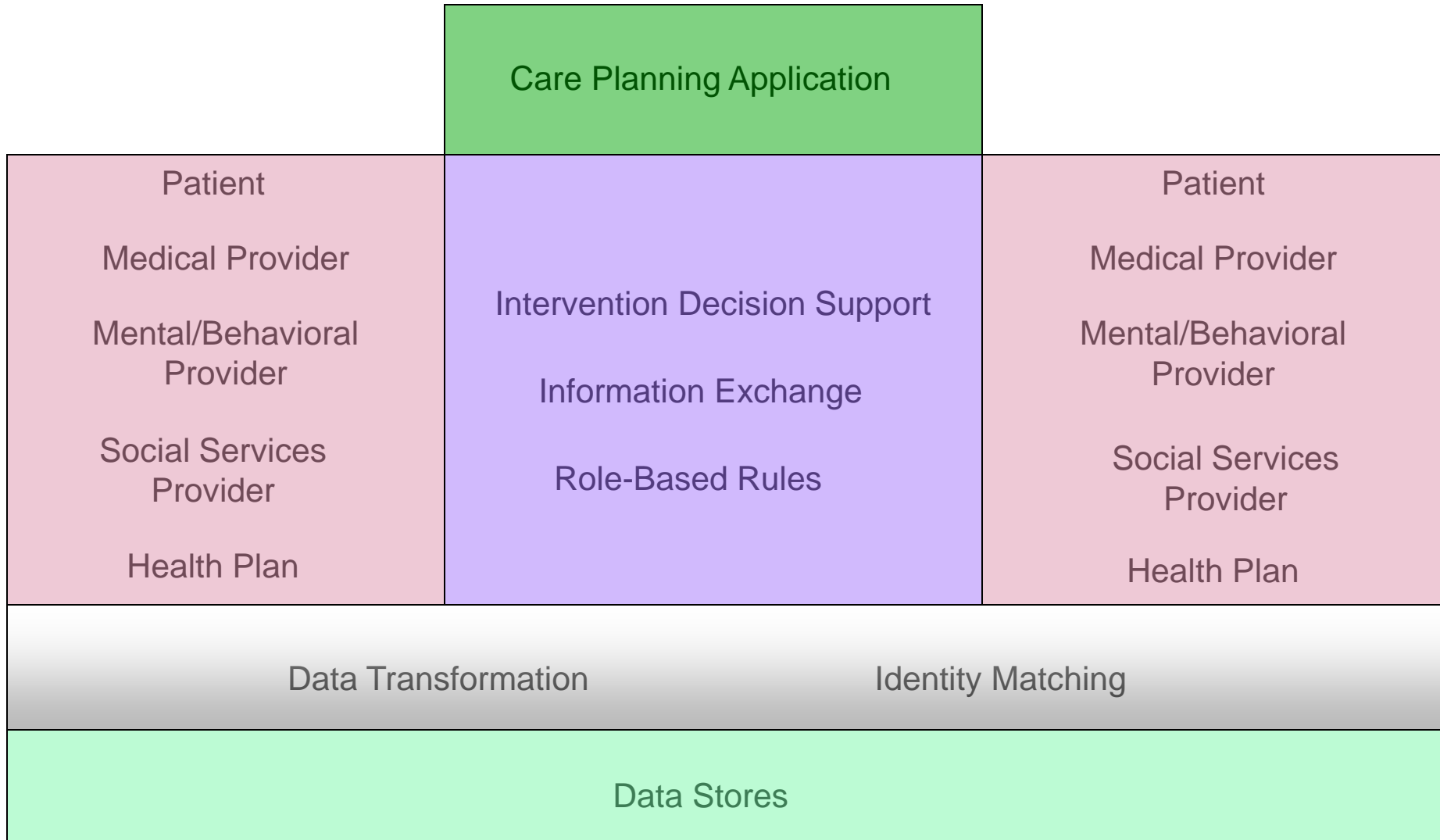
- Import and update foundational information: diagnoses, meds, demographics, contact info, care team, utilization
- Provide ability for care manager to document goals, problems, actions
- Suggest appropriate interventions for problems (decision support)
- Enable care manager to document which actions the patient has agreed to
- Accept assessments, care plans from other providers
- Link to secure email to other providers and patient
- Prompt care manager for needed actions within plan and in work queue
- Prompt patient for needed actions and accept or link to self-monitored information reporting

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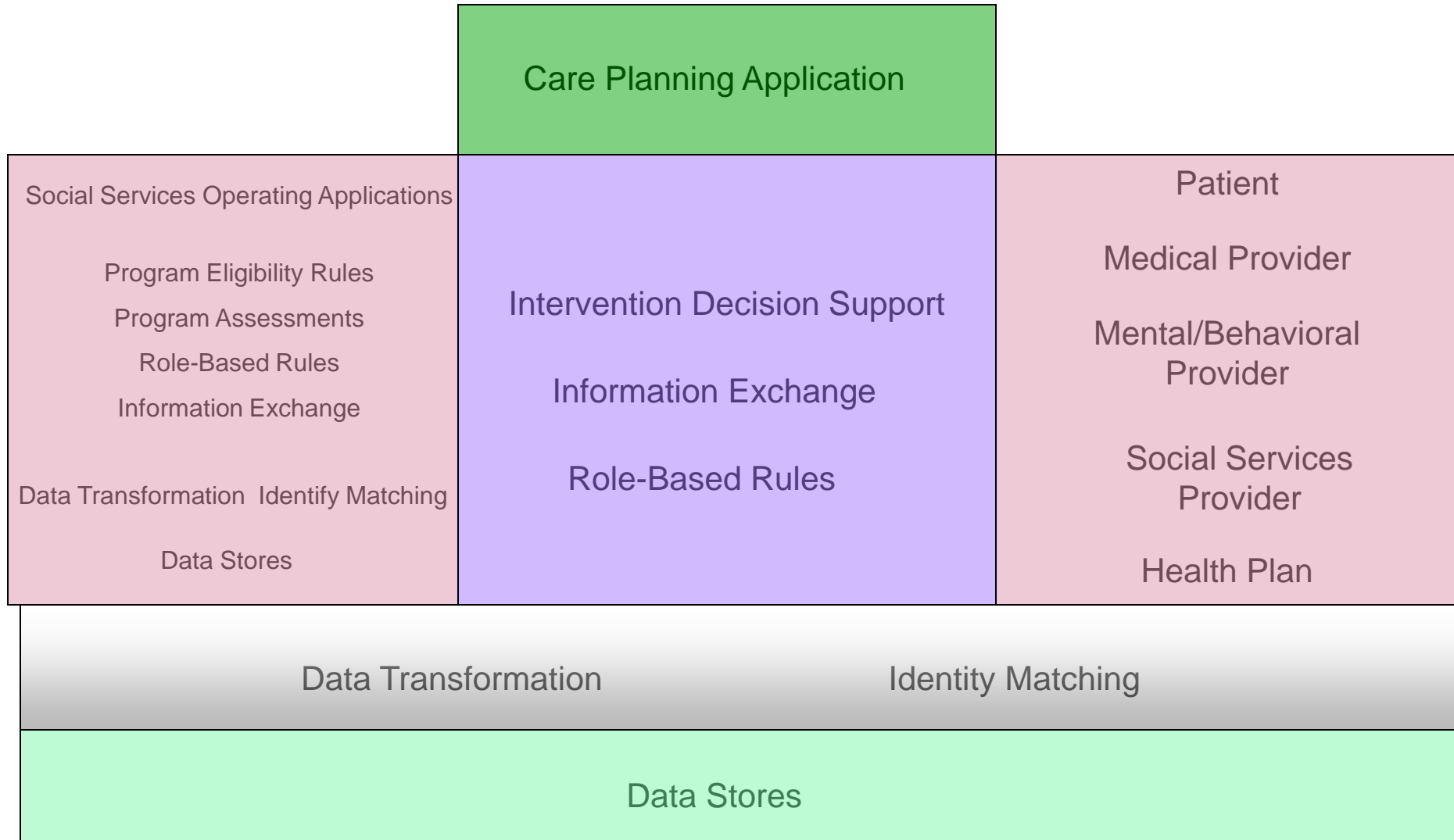
## How might care planning systems evolve?

- Basic care plan
  - Goals, problems, actions
  - Differentiates patient agreed actions
  - Printable, emailable version for patient
- Decision support care plan
  - Basic plus suggested interventions for specific problems
  - Prompts care manager for follow up actions
- Coordinating care plan
  - Imports foundational data
  - Imports assessments and care plans from other providers
  - Links to secure email of other providers/patient
  - Prompts patient and accepts self-monitored information

# What might an idealized care planning system look like?



Each coordinating entity may require its own infrastructure, eg the social services provider



## What are some issues that need to be addressed?

- Assessment
  - Is there potential for standardized content? (?consensus opportunity)
  - Can the data be structured? (?consensus opportunity)
- Care plan
  - What the required functionalities (?MU Stage 2 – may not create value)
  - Is there a standard format?
  - Is there some standard content and which data are structured? (?problems, actions)
  - Will the market drive availability of care planning applications?
- Social services information
  - Is there a standard format? (?consensus opportunity)
  - Is there some standard content and which data are structured? (consensus opportunity)
- Privacy
  - When is it ok to share data? (?consensus opportunity)
  - How does consent relate to other data sharing consent? (?consensus opportunity)
  - How are privacy preferences effected? (?open source services opportunity)
- Data exchange
  - What is the messaging format?
- ???

Input is welcome!  
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