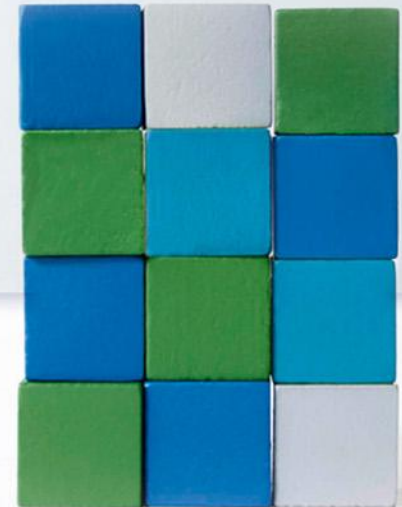


Tailored Case Management

Healthcare & IT Strategies for the
Care Continuum

Steffen Dietz, ICW AG
EHTEL Symposium 2011



Global Trends and Challenges

Drivers for a New Case Management Approach



Quality, Outcomes and Costs

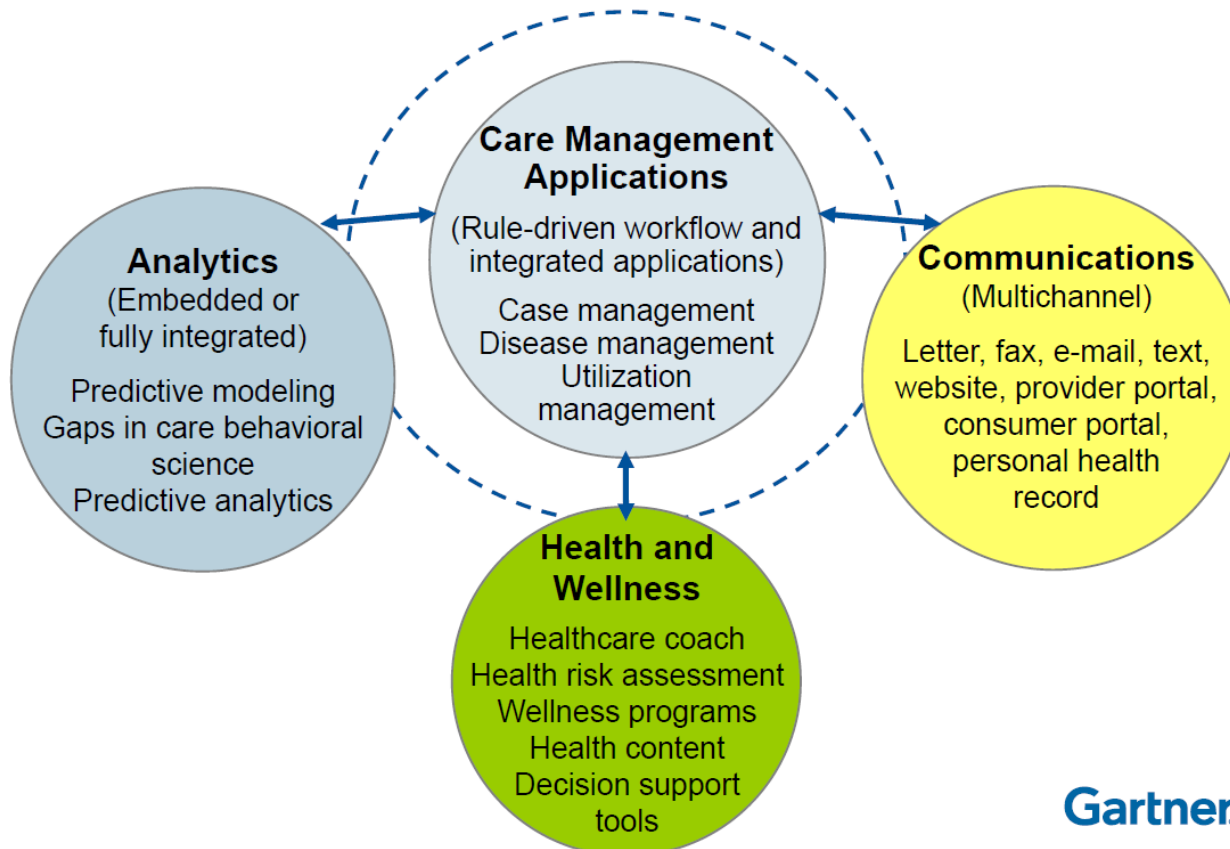
- Aging Population
- Changing Spectrum of Diseases
- Multimorbidity
- Shift from Acute Care to Prevention and Early Diagnosis
- Appropriate Care for Specific Patient Groups

- New Reimbursement Models
 - Value Based Purchasing
 - Bundled Payments
 - Pay for Performance
- Penalties for Poor Outcomes
 - Preventable (Re-) Hospitalizations
 - Adverse Drug Events

- Limited Resources
- Lack of IT Support
- Data Silos and Heterogeneous Systems
- Redundant , Un-necessary Tests and Procedures
- Lack of Guidance for Providers

Gartner Care Continuum Definition

Case Management within an Integrated Solution



✓ Information platform: real time, objective view of the patient's current clinical status.

✓ Seamless handoff between all departments.

✓ Share and store all pertinent information on patient, employer, provider.

✓ Business rules, decision tree tables, workflow, and evidenced-based medicine.

✓ Analytics & reporting of outcomes, quality indicators, staff productivity, and benefit utilization.

Gartner

Case Management

A Definition across Europe



**“You don’t know the exact definition of *Case Management*?
Don’t worry, there is not a single definition or source of truth.”**

Case Management:

“A collaborative process of assessment, planning, facilitation, care coordination, evaluation, and advocacy for options and services to meet an individual’s and family’s comprehensive health needs through communication and available resources to promote quality cost-effective outcomes.”

"Case management is a procedure to plan, seek, and monitor services for different social agencies and staff on behalf of a client. Usually one agency takes primary responsibility for the client and assigns a case manager, who coordinates services, advocates for the client, and sometimes controls resources and purchases services for the client. The procedure allows many social workers in the agency, or in different agencies to coordinate their efforts to serve a given client through professional teamwork, thus expanding the range of needed services offered."

Challenges and Barriers

Why Implementation is so Difficult

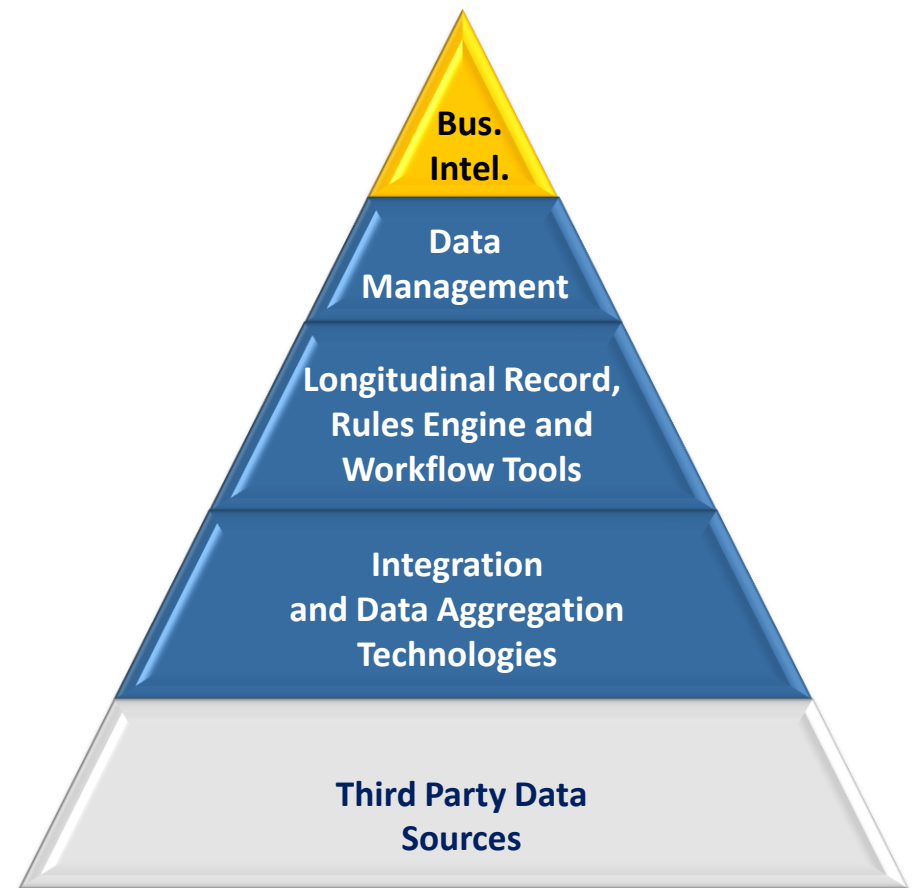


- Lack of integrated care systems
- Lack of longitudinal responsibility across settings
- Lack of standardized forms and processes
- Incompatible information systems
- Ineffective communication
- Payment is for services rather than incentivized for outcomes
- Compensation and performance incentives not aligned with goal of maximizing care coordination and transitions
- Lack of valid measures of the quality of transitions

Smart Analytics

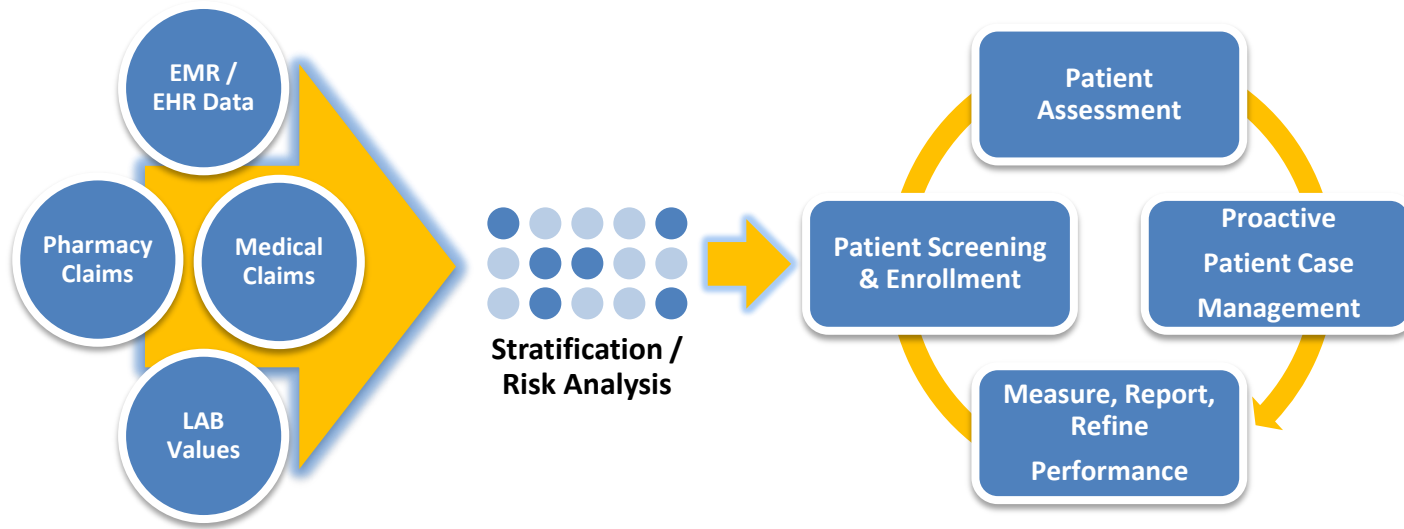
The Role of Analytics in Healthcare

- To use resources efficiently, the retrospective as well as prospective view on a population becomes more and more important
- Information Exchange in Healthcare (HIE) gains a whole new dimension
- Modern Case Management requires the aggregation and harmonization of both clinical and financial data
- This foundation explains the evident trend towards Data Warehouse and Business Intelligence Solutions (BI)
- This drives HIE requirements and the sources and types of data that needs to be integrated and aggregated



Smart Analytics for Case Management

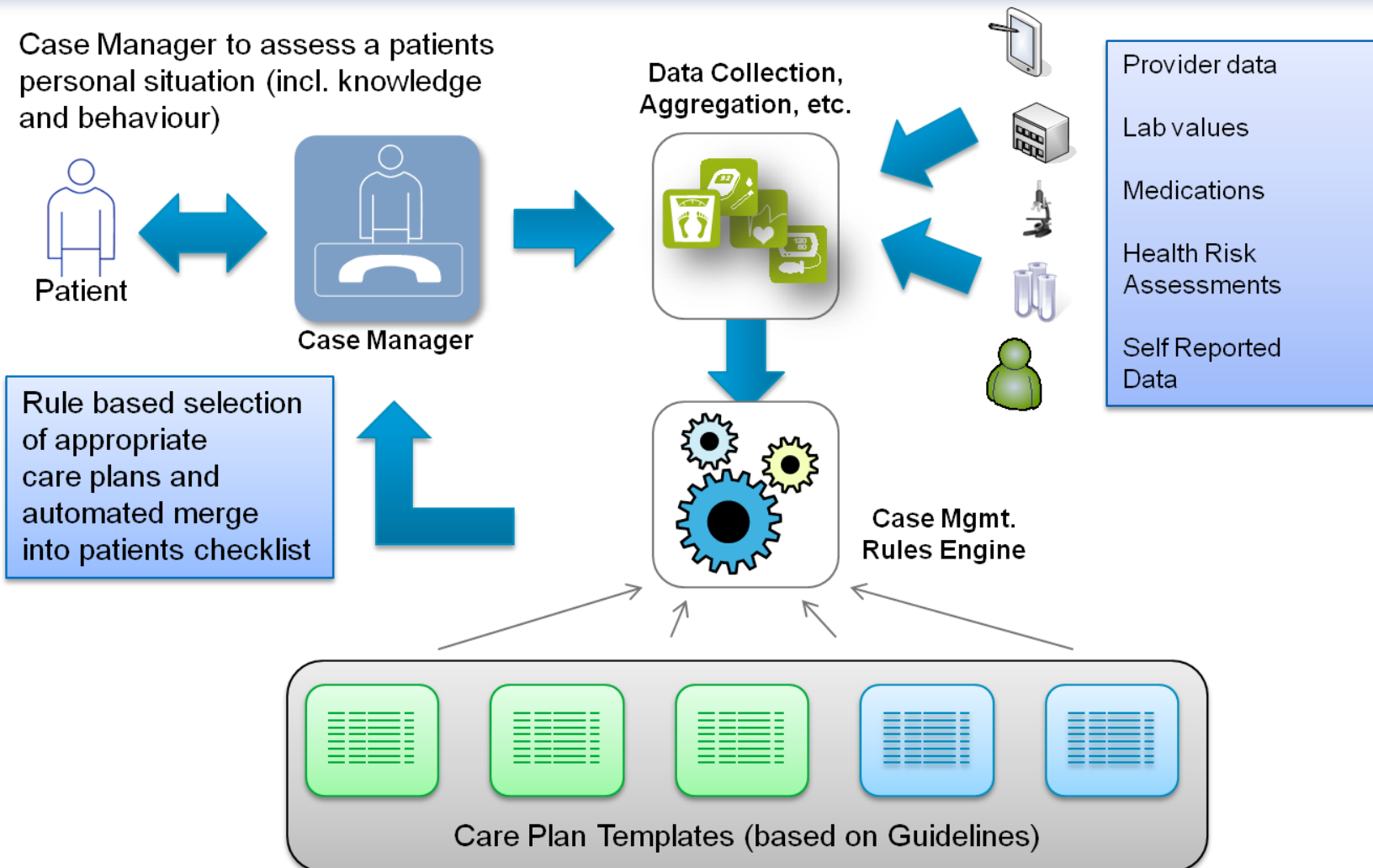
From Stratification to Better Patient Care



- Predictive Modeling to Facilitate Data Transparency and Actionable Intervention Strategies
- Risk Stratification to Quantify Disease Burden and Trends in Cost and Care
- Implementation of Cost Containment and Quality Enhancing Initiatives
- Evaluation of Case Management Programs to support Continuous Improvement
- Case Mix and Severity Adjusted Analysis of Provider and Vendor Performance

Seamless Service Integration

Rule-driven Patient Workflows





Tailored Case Management

AN EXAMPLE FOR SEAMLESS SERVICE INTEGRATION

Tailored Case Management

Bladder Cancer Treatment



- Fifth most common form of cancer in the US
- More than 70.000 Americans were diagnosed last year and almost 15.000 died from it
- Bladder Cancer survival rate not improved in the last 25 years
- Almost no patient gets the appropriate treatment (1 of 4.545 patients) even though guidelines are available
- There is a 50-70% chance for recurring after tumor was removed without appropriate treatment
- 42% of doctors failed to perform tests once

Source: Compliance With Guidelines for Patients With Bladder Cancer. Karim Chamie, MD, MSHS; Christopher S. Saigal, MD, MPH; Julie Lai, MS; Jan M. Hanley, MS; Claude M. Setodji, PhD; Badrinath R. Konety, MD, MBA; Mark S. Litwin, MD, MPH; and The Urologic Diseases in America Project, Cancer 2011; :000–000. VC 2011 American Cancer Society

Bladder Cancer Treatment

Simple Case Management Process with High Success Rates

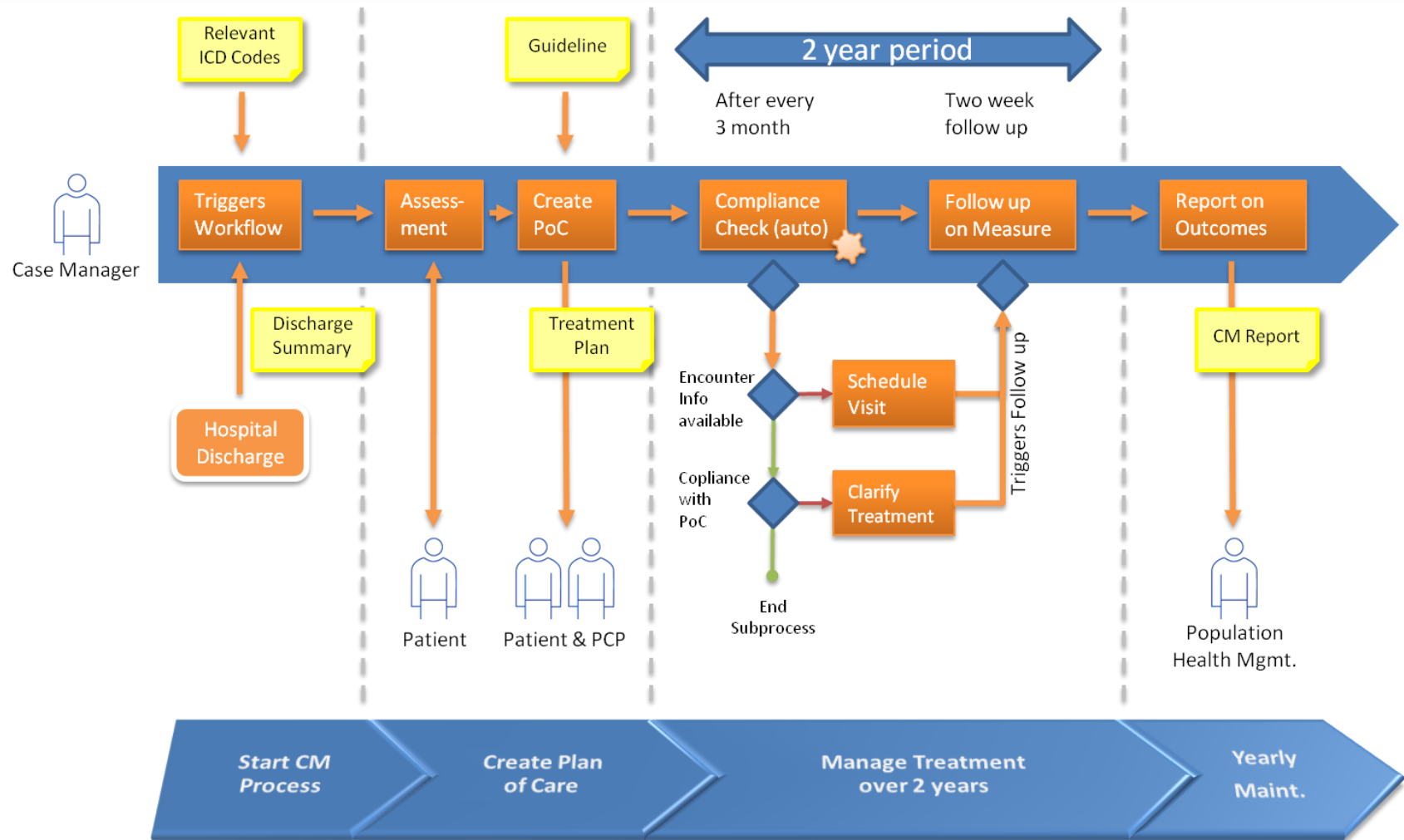


- First 2 years:
 - Every 3 month urine tests for abnormal cells
 - Examine inside of bladder
 - Administer anti-cancer drugs at least 6 times
- Patient needs to be educated and know treatment
- Doctors needs to keep track of appropriate procedures and drugs

Source: **Bladder Cancer** [Guideline for the Management of Nonmuscle Invasive Bladder Cancer: \(Stages Ta,T1, and Tis\): Update \(2007\)](#)
(Reviewed and validity confirmed 2010.), American Urological Association (AUA)

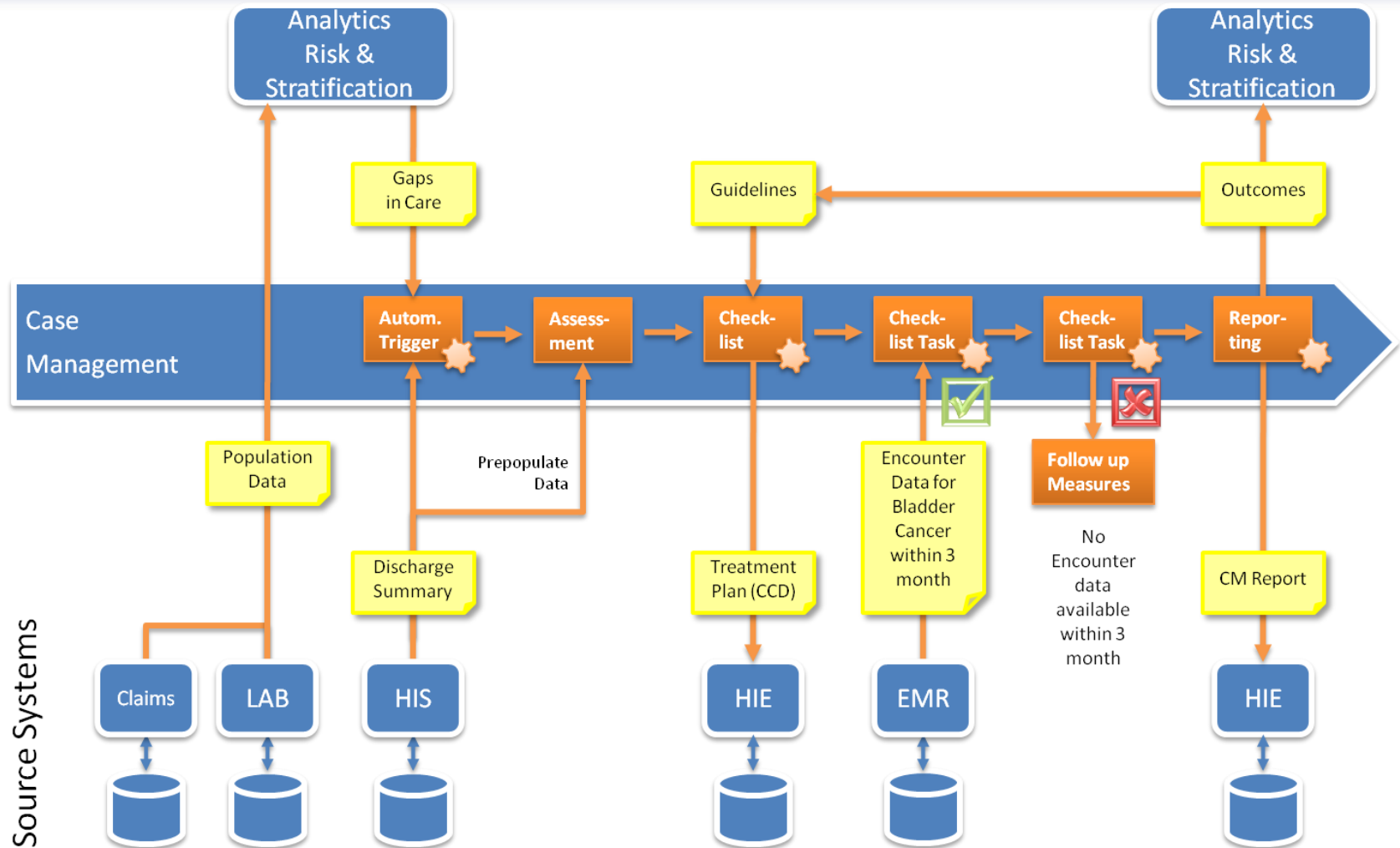
Applying Guideline to a Process

Case Management Process for Bladder Cancer



Tools for Case Management

HIT Support within a Bladder Cancer Process



Recommendations for an IT Strategy

HIT is Essential for the Case Management Success



- **Secure and comprehensive** systematic collection, storage, management, and **exchange of health information among providers, patients** in the process of care delivery and care coordination
- Plan towards a **longitudinal patient record** that contains encounter, problems, allergies, medications, labs, etc. and move towards **discrete data** based on standards (HL7, IHE, CDA, etc.)
- **Embedded** collection of information **in the workflow of care delivery**
- Facilitate the **ongoing measurement** of processes and outcomes regarding quality, costs and other metrics
- Integrate **evidence-based clinical decision support** system (CDSS) services into the workflow of health care providers and their practices
- Support the **analysis of clinical, administrative, and financial data** in order to support operations, improve care and better patient outcomes



Thank You, Questions?

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