Setting the Stage for the Future

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St. Joseph Health

DATA DRIVEN STRATEGY
MEDITECH STANDARDIZATION
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St. Joseph Health

Our hands touched so many in our communities — 155,000 inpatients, 5.1 million outpatient encounters and 2.2 million medical office visits.

We were honored to be at the births of more than 18,000 babies and we were at the side of 2,800 individuals as they passed to eternal life. It was a full year, a year of great activity and of great hope.

St. Joseph Health

St. Joseph Health
Information Sophistication
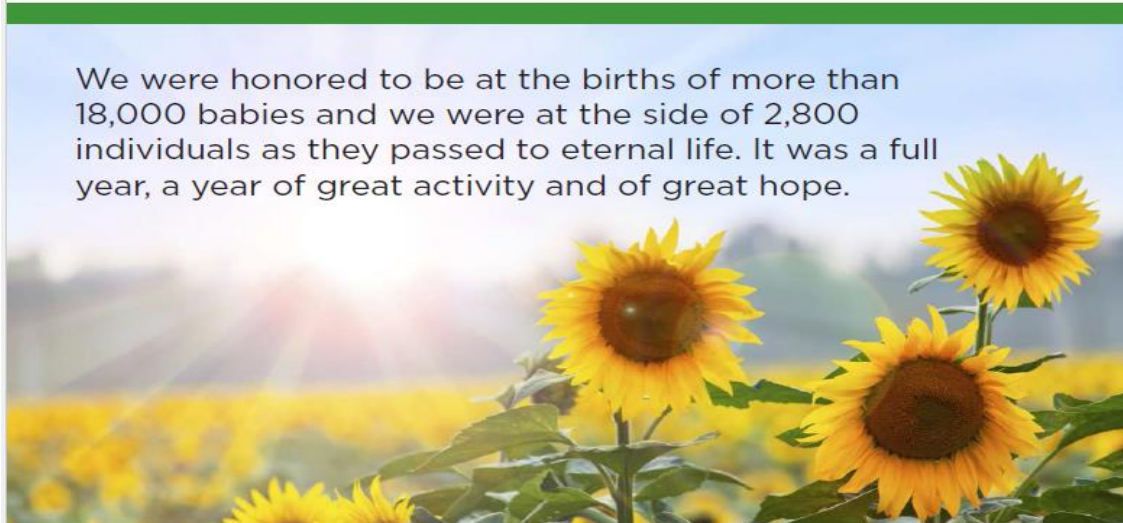
Through all these accomplishments and challenges, we have continued to extend the healing ministry of Jesus in the tradition of the Sisters of St. Joseph of Orange.

Each and every day, we work to:

- Save a life
- Help a family heal
- Meet one another's spiritual needs
- Bring more of our community together
- Make a difference in the lives of those we serve
- Be a community that serves, that speaks, that celebrates and prays in such a way that others – regardless of their religious belief – encountering this community experience a revelation of life's deepest truths ... about human dignity, community, success, power, growth, sacrifice, love, suffering, debility and death.

Experiencing a harmony between their heart's deepest resonances and this community's character, persons go from this encounter more healed, more whole, more able to live, to love, to hope and to die.

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OUR JOURNEY

St.JosephHealth

Pathway

Laying the Foundation

- Standardize
- Utilization

Utilizing the Data

- Optimize
- Dashboards

Transforming Care

- Rules/ Alerts
- Prescriptive Analytics

Laying the Foundation- Standardization

- August 2012 Standardization Summit

- Sept 2013 first of three regions goes live

- June 2014 (9 months) system live across all 14 ministries

- Industry unprecedented timeline and scope

Helpful Tools

- Focus Groups

- SBAR – Rapid Decision Tool

- Benchmark data - Utilization

SBAR Process

- ☐ Situation

- ☐ Background

- ☐ Assessment

- ☐ Recommendation

- • Review for approval of Recommendation

Utilizing the Data- Optimization and Analytics

- Several Optimization Initiatives
  - ED Optimization
  - Care Plan Collaborative
  - Discharge Process
- Requests
- Business Clinical Analytics Real-time Dashboards

Helpful Tools

- eChange and Governance Groups

- Rules and Alerts

- Real-time Data Dashboards

eChange

Clinical and Business Governance

Health System Operations Standards Committee (HSOSC)

Enterprise Physician Advisory Council

Regional Physician Advisory Councils

Clinical Governance Groups

(8 Ancillary, 11 Nursing)

Revenue Cycle Governance Group

Financial Services Governance Group

Real-Time Dashboards
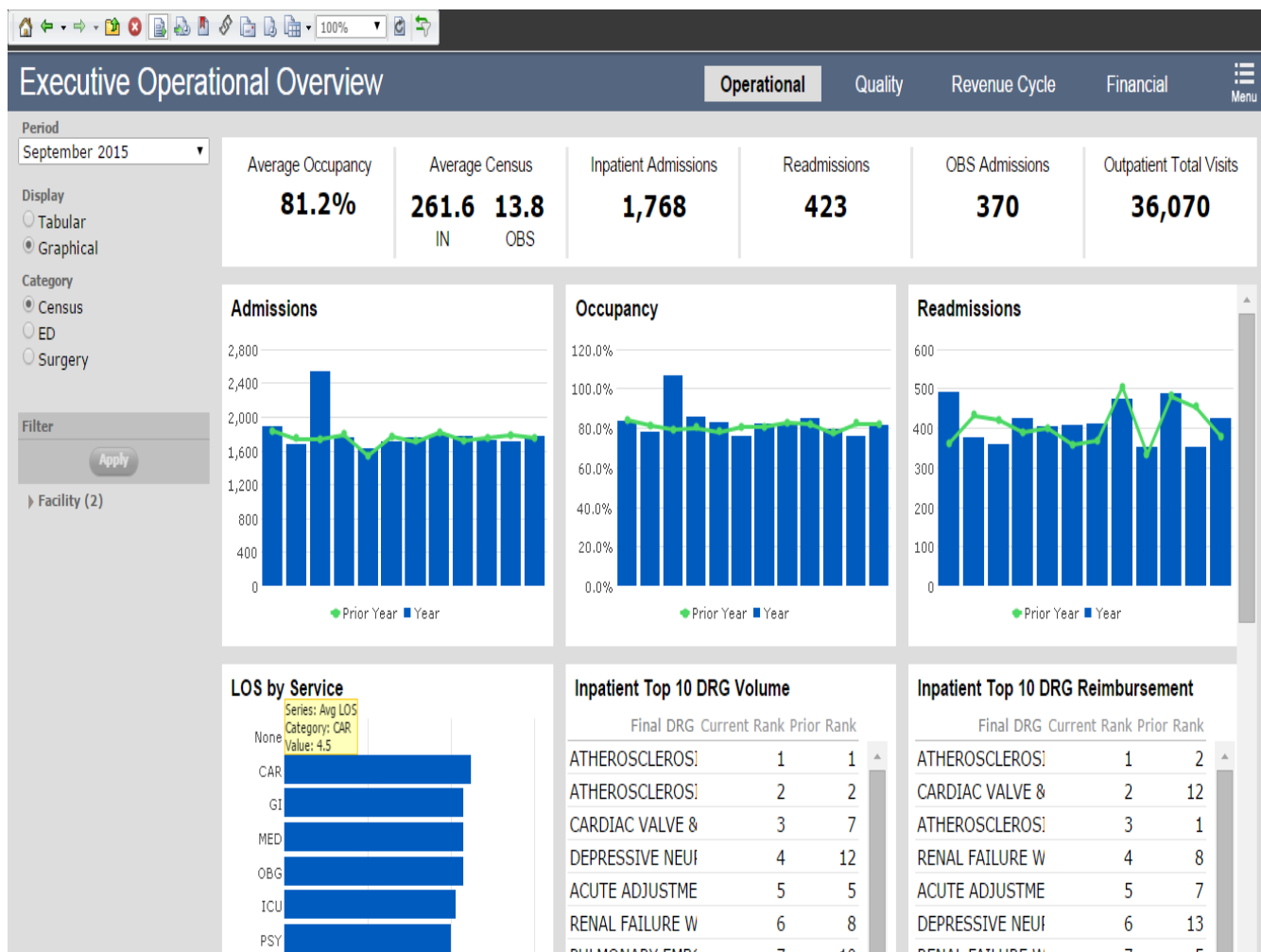
Real-Time Dashboards
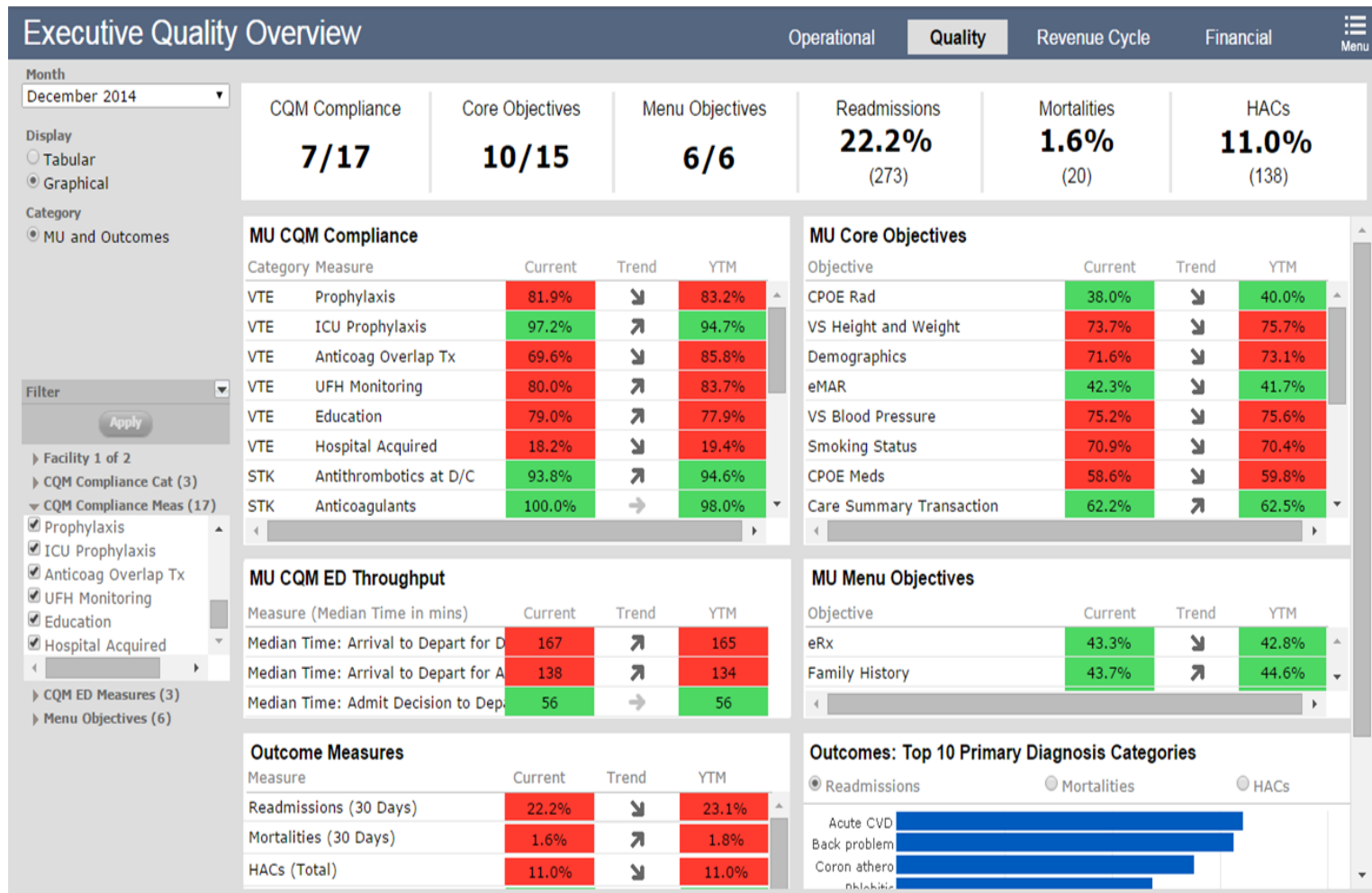
Real-Time Dashboards

Utilizing the Data- Added Benefits

- Cancer Research Registries and Trials
  - Recruitment of patients for participation could be accelerated by mining clinical databases to locate eligible patients.
  - Design of clinical trials can be improved by using clinical databases to ensure optimal coverage of different patient populations within the trial.
- Donor matches

Transforming the Care Prescriptive Analytics- The Promise

Two Main Goals or Promises

- Improve patient outcomes

- Lower costs

Use of algorithms based on relational databases

So What Is Prescriptive Analytics

- Using data to know what might happen
  - Allows modification of conditions to a desired outcome

- Demonstrated benefits in many industries

- Usage in health care lagging behind

- Prescribes a course of action that would produce an optimal result, considering constraints and other variables

Who All Is In The Game of "Prescriptive Models"

- Insurers

- Technology firms

- Hospitals

- Health systems

- Physician offices

- Patients

With Healthcare
It Gets a Little Scary

- How good is the data

- Plans to alter the natural outcome- SciFi or Not?

- New method of potentially curing disease raises its own set of ethical questions

- Predict could eliminate hereditary diseases but prescriptive analytics could further hone

Is it in the near future?

- Zuckerberg, the co-founder of **Facebook**, and his wife, Priscilla Chan, will give billions to advance various social causes over their lifetime

- Zuckerberg and Chan wrote in an open letter to their newborn daughter—is that "one day, you or your children will see what we can only imagine: a world without suffering from disease."

So how wonderful if it leads to...

- ***Personalization of Care***
  - Improve care by tailoring it to the needs of individual patients

- ***Personalized Medicine***
  - tailoring drug regimens and other treatments based on the genetic characteristics and prescriptive analytics

New Prescriptive Analytic Companies

- Industry seeing spawning of new companies of data scientists

- Formulating relational databases with high degrees of predictability

- Imagine a world where you could predict with 70-80% accuracy that someone would have a heart attack within the next 6 months if variables were not altered
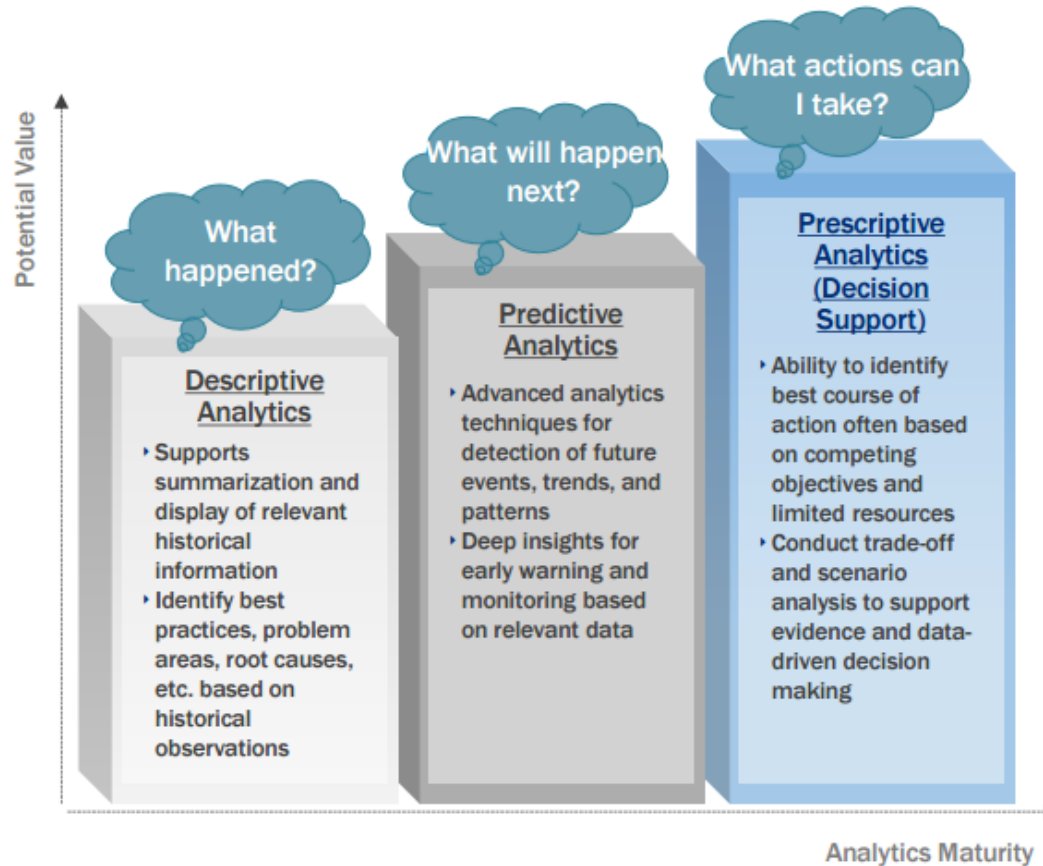
- Those days are HERE!

The Future

- Building of large databases partnering with prescriptive analytics companies

- Formulating most difficult questions and areas of focus

- Using the power of the computing to run algorithms and prescribe on most impactful interventions

The Evolving Journey

Analytics Capability Maturity Model

Hold On To Your Seats

"I've come to believe that each of us has a personal calling that's as unique as a fingerprint—and that the best way to succeed is to discover what you love and then find a way to offer it to others in the form of service, working hard, and also allowing the
energy of the universe to lead you."

*–Oprah Winfrey, television host,
producer and philanthropist*

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Thank You