Improve Patient Care.
Maximize Business Results.

Implementing CMMI in a Virtual Development Organization

Rick Bennett, Director of Development

November 16, 2010

MedPlus
A Quest Diagnostics Company

MedPlus

- Customer facing software division of Quest Diagnostics Incorporated.
  - Hospital / IDN
  - HIE / Government
  - Physician Office

- Quest Diagnostics is the world's largest chain of clinical diagnostic laboratories.
  - Grown by acquisition
  - Disparate systems and data centers
  - Greater than a half million specimens per day

MedPlus
A Quest Diagnostics Company

Care 360 Lab Orders and Results

- Originally developed in 2000
- >60 % percent of Quest Diagnostics orders pass through Care 360 LOR
  - > 300,000 per day
- 990,000 registered users
- 44,000 simultaneous peak users per day
- 42,000,000,000 unique results
- 19 TB of data
- Six Sigma up time
- Every specimen represents a human life
- Awarded United States Patent #7,567,913

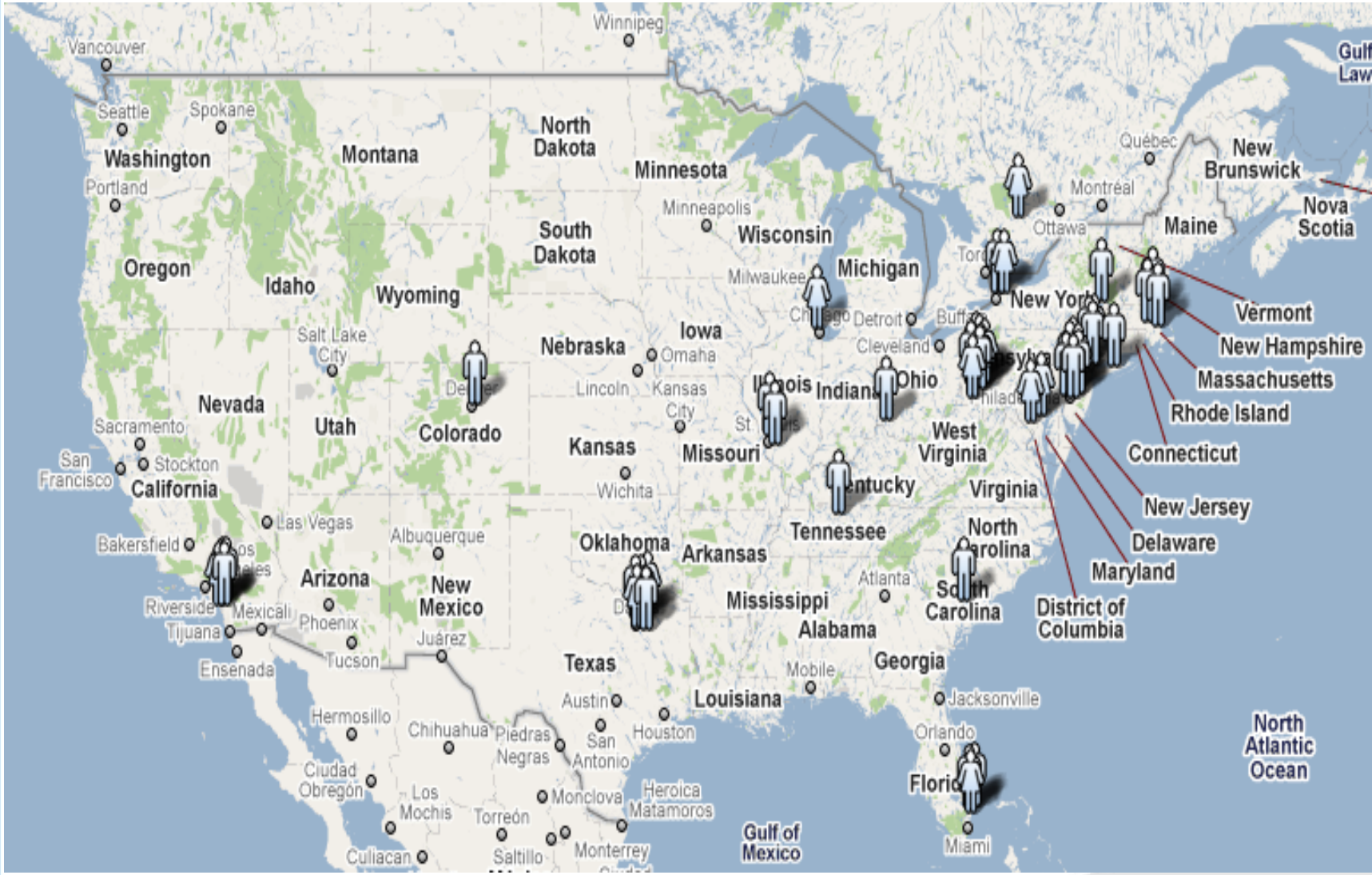
MedPlus
A Quest Diagnostics Company

Diagnostics Services Group

- Extremely virtual team
- 45 Developers, requirements analysts, QA analysts, support analysts, PM's and resource managers in 16 locations
- Modified waterfall SDLC
- 4 releases per year
- Six Sigma trained
  - 2 Black Belts, >10 Green Belts
- Daily all hands calls
- Heavy use of instant messaging and smaller conference calls.
- High employee satisfaction
- Function points analysis showing consistently high productivity

MedPlus
A Quest Diagnostics Company

LOR Team Geographically



MedPlus
A Quest Diagnostics Company

Why CMMI?

- Low CMMI penetration in HealthCare IT
  - > Not a necessity for sales in our market space
- Create a more predictable process
  - > Make post release week feel like any other week
- Improve quality where possible
- Align to customer goals
- Maintain autonomy
  - > Team structure and geography unique to our organization

MedPlus
A Quest Diagnostics Company

How did we get to Level 5?

- Management involvement
  - > Training
- Leveraged Six Sigma training and culture
  - > Access to Master Black Belts
- Stretch to achieve a level then refine those processes while pushing to achieve the next level.
  - > SEPG
  - > Obtain practitioner feedback and refine
  - > Perfect is the enemy of good for initial processes
- Keep focus on the reasons for process improvement
- Tap into innovative spirit
  - > Particularly at the High Maturity levels

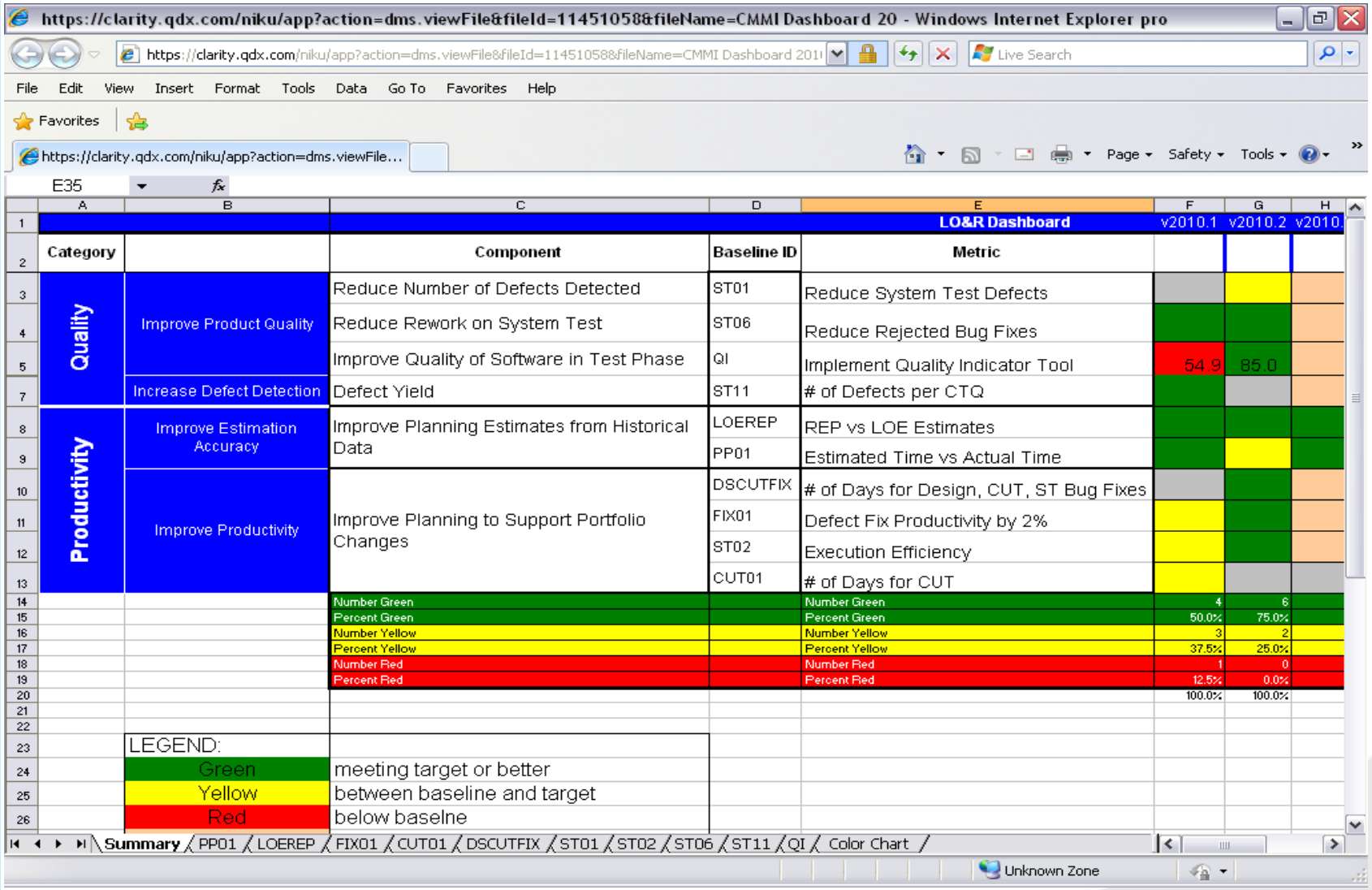
MedPlus
A Quest Diagnostics Company

Results

- Assessed at CMMI Level 2 - August 2005
- Assessed at CMMI Level 3 – July 2008
- Assessed at CMMI Level 5 – June 2010
- Acknowledged process leaders in our organization and company
- Increased visibility into status of processes during development phases and increased understanding of process capability yielding increased confidence in final product
- Increased visibility into linkage between micro activity and fulfillment of customer goals

MedPlus
A Quest Diagnostics Company

QPPO Dashboard.



MedPlus
A Quest Diagnostics Company

Questions?

Rick.J.Bennett@questdiagnostics.com

MedPlus
A Quest Diagnostics Company