VistA Customization, Configuration and Content:
A Collaborative Approach

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The Golden Pair

"A VISTA project requires the Golden Pair to succeed - so decisions about direction are made by programmers and the medical professionals who will use the software, working together as a team to explore what's possible and useful."

Rick Marshall

Medscape Physician Survey

The Best-Ranked EHRs
Overall Score

1 = Poor   5 = Excellent

Amazing Charts	4.22		Centricity	3.20
Practice Fusion	4.04		Cerner	3.15
VA-CPRS	3.89		Greenway	3.04
Medent	3.65		Allscripts	3.00
e-MDs	3.56		MEDITECH	2.94
Epic	3.51		Practice Partner	2.91
athenahealth	3.44		McKesson	2.91
eClinicalWorks	3.36		NextGen	2.81
Sage	3.22			

21,202 respondents across 25 specialties
Data collected by Medscape from May 30 to June 15, 2012

The "Golden Pair" concept applies to new program development, but also to any modification of VistA that impacts on the medical professional users experience.

Customization

❑ VistA program code changes to meet unique needs of an organization

❑ Interfacing VistA to other information systems

Configuration

❑Does not involve programming

❑Does involve:

> ❑setting options
>
> ❑setting parameters
>
> ❑entering users
>
> ❑entering lab test and drug information
>
> ❑setting up Notifications
>
> ❑and more

Content

- Documentation templates

- Orders and order set parameters

- Clinical decision support, such as Clinical Reminders

Collaboration

- Customization, configuration and content development all impact the end-user's experience with VistA

- Whenever possible, these changes should be done as a reiterative team effort with key end-users

Customization Collaboration

David Whitten has worked intensively with our Pharmacy Informatics group to customize the interface to Pharmacy technology

Interface to the ADC System

CRH uses <u>A</u>utomated <u>D</u>ispensing <u>C</u>abinets for medication storage and distribution at the hospital ward level

Interface to the ADC System
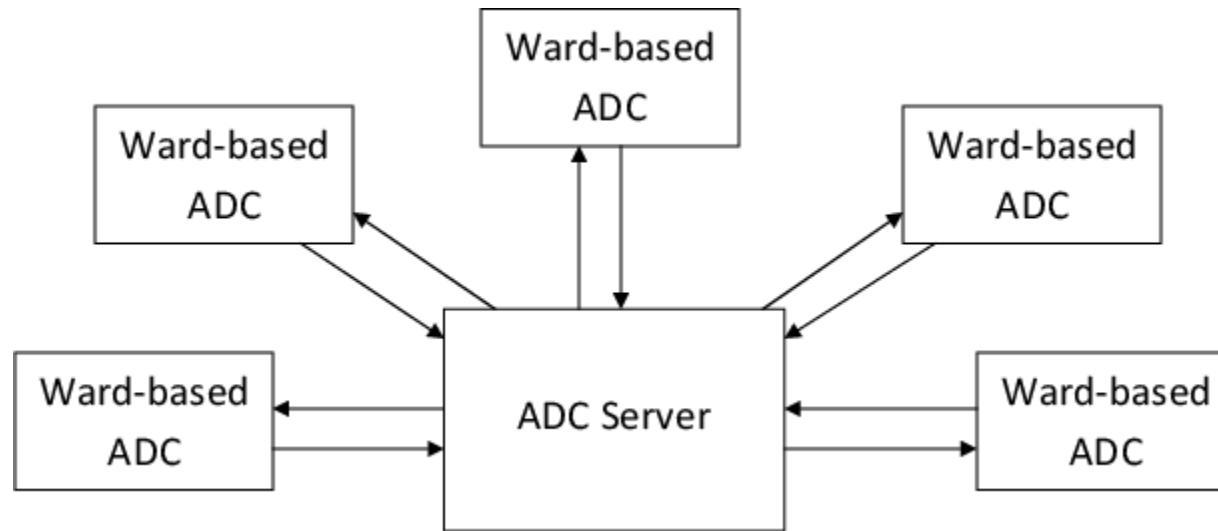
The ADC Server holds each patient's medication profile and also tracks what medications are stocked in which cabinet and which drawer within the cabinet

Interface to the ADC System

CPRS Med Orders → VistA Pharmacy

ADC Server ↕ Automated Dispensing Cabinets
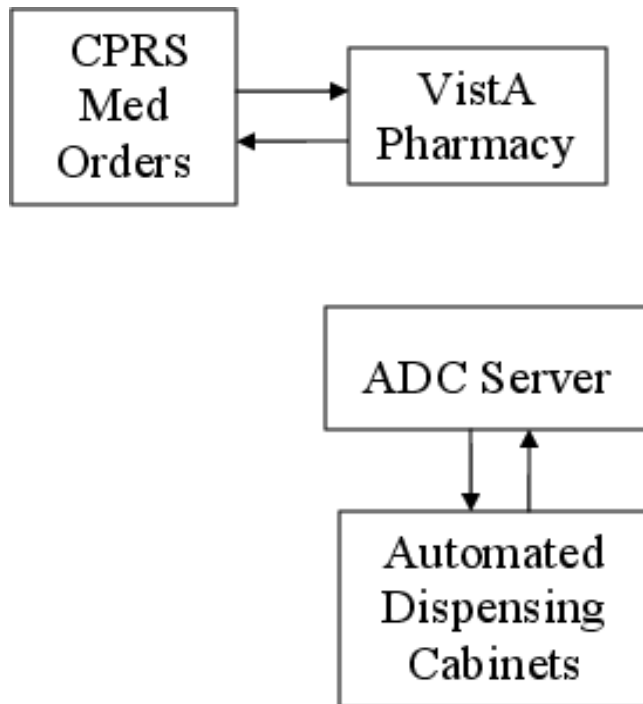
The Pharmacist processing med orders in VistA Pharmacy needed to know if a medication was stocked in the ADC on the patient's ward.

The ADC Server needed to update a patient's medication profile when an order was entered or discontinued.

Interface to the ADC System

```
┌──────────┐      ┌──────────────┐
│  CPRS    │─────▶│    VistA     │
│  Med     │      │   Pharmacy   │
│  Orders  │◀─────│              │
└──────────┘      ├──────────────┤
                  │  Automatic   │
                  │  Replenish / │
                  │  Ward Stock  │
                  └──────┬───┬───┘
                         │   ▲
                         ▼   │
                    ┌──────────┐
                    │  Mirth   │
                    └────┬─────┘
                         │
                         ▼
                    ┌──────────┐
                    │   ADC    │
                    │  Server  │
                    └────┬─────┘
                         │
                         ▼
                  ┌──────────────┐
                  │  Automated   │
                  │  Dispensing  │
                  │  Cabinets    │
                  └──────────────┘
```
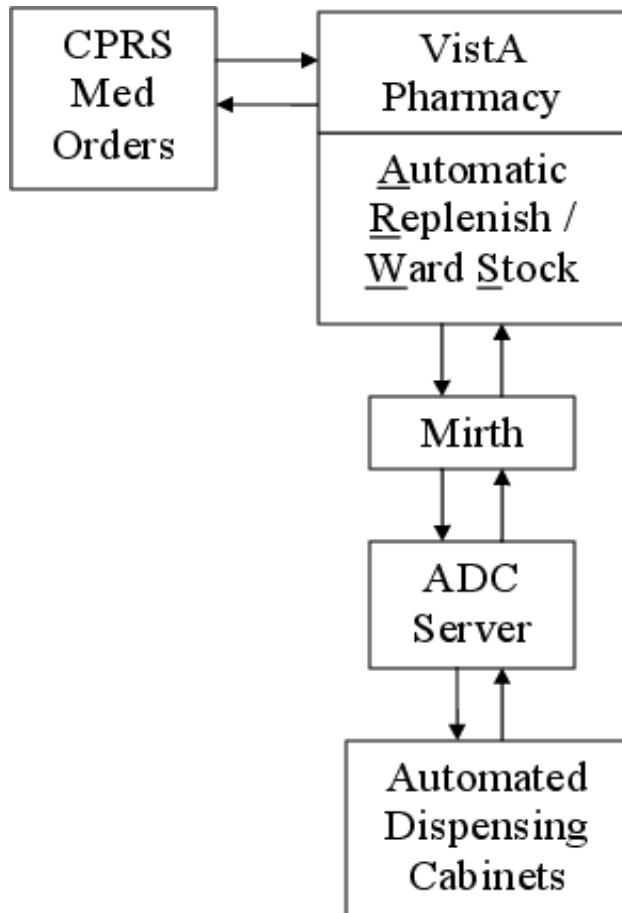
We leveraged the ARWS module in VistA to map the cabinets information for VistA Pharmacy.

We employed the open-source HL-7 interface engine, MIRTH, to facilitate the communication between VistA Pharmacy and the ADC Server

Customization Collaboration

Joe Thurber worked with the Nursing Informatics group to customize BCMA

BCMA Customization

- NCID sign-on
- Fractional dose management
- Witness for high risk medications
- Response to routine pain meds
- Patient pictures
- First dose patient education

Customization Collaboration

Joe Thurber collaborated with physicians and social workers in making modifications to CPRS. Marci Keiser served as an intermediary and project manager

Added Primary Contact

Added Primary Contact

Configuration Collaboration

Joe Thurber and Matt King both worked with end-users to configure different aspects of VistA

Large group of physicians, nurses, lab personnel, radiology personnel and quality management staff

Configuration Collaboration

- Notifications
- Postings
- Order tab options

Content Collaboration

Began with
knowledge transfer
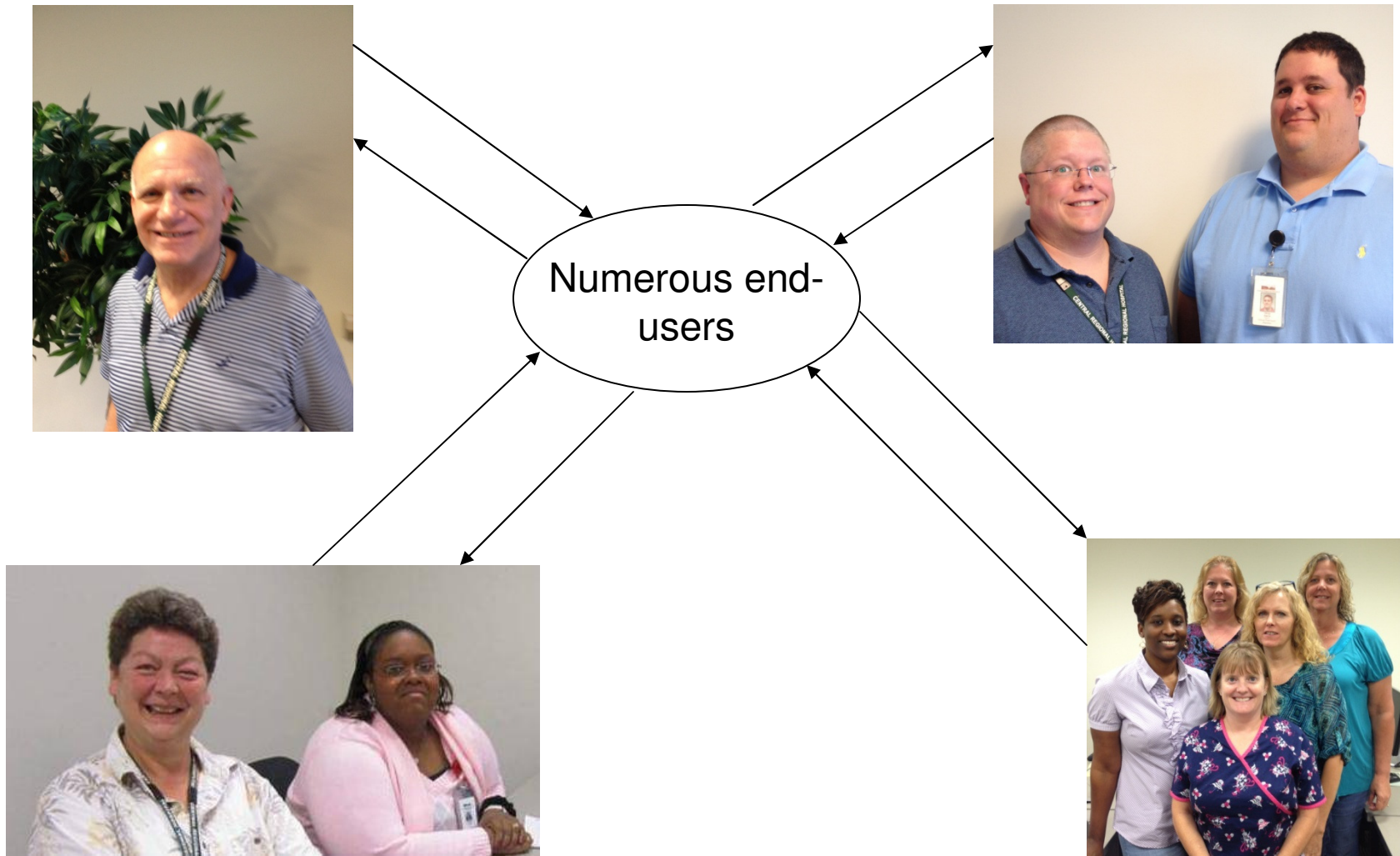

Matt King trained
others to help

HIM and QM
Informatics

Nursing
Informatics

Content Collaboration

Numerous end-users

Content Collaboration

- Documentation templates
- Order sets
- Ordering guidance
- Clinical Reminders
- Transfer summaries
- Discharge Summary format and content

Questions?

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