

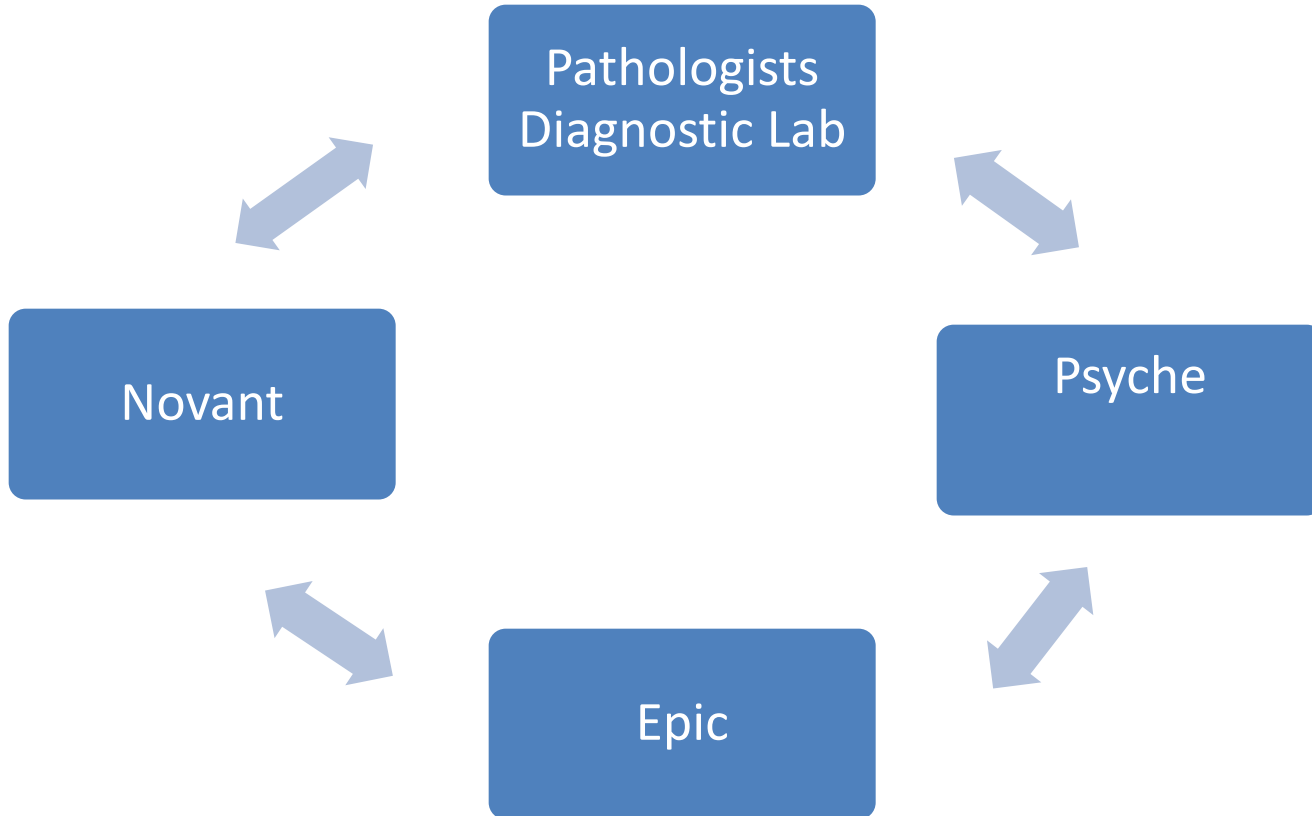
***Leveraging Informatics to Boost Local
Pathology:
How We Interface with Epic's EMR and
Psyche to Monitor Client Service in Real Time***

*Julie Williams, MT(ASCP)
Director of IT
Pathologists Diagnostic Laboratory, P.A.
Winston-Salem, NC*

- Evolution of one large, successful interface project with greater than 60 clients on one interface
- The background of the players in this project
- The build and design
- The implementation and daily monitoring
- The future
- How this project has given our local pathology group a “golden” opportunity in the market.



The Players



History Lesson: My Background

The 1980's

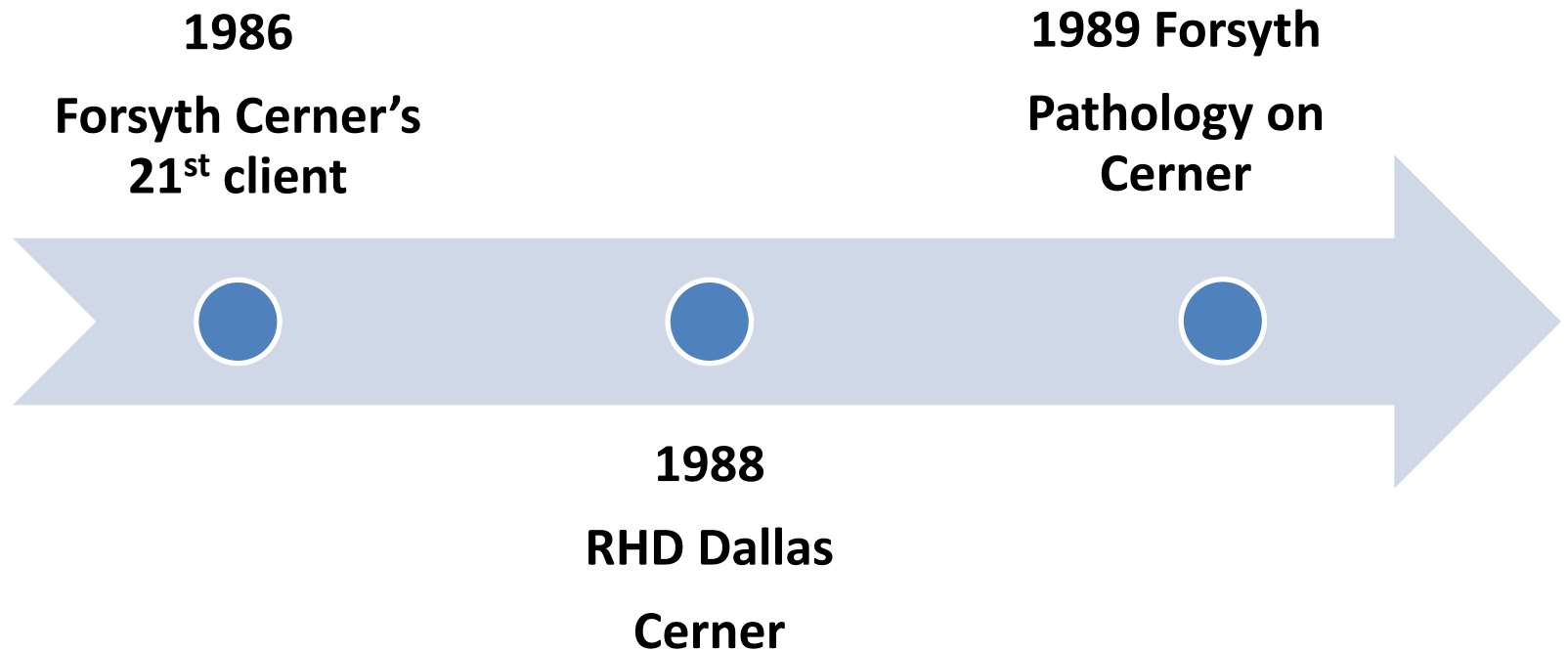
First hospital lab software conversions

Forsyth Memorial Hospital

Medical Technology Class



The 80's continued



The 1990's

The Computer Age

Athens, GA



Shadowfax Farm

*Meanwhile back in NC, Novant Health was formed in 1997 merging Winston-Salem and Charlotte area hospitals, including Forsyth Medical Center.

The 2000's

Interfaces

Novant Health, Winston-Salem

Time to catch up



2002

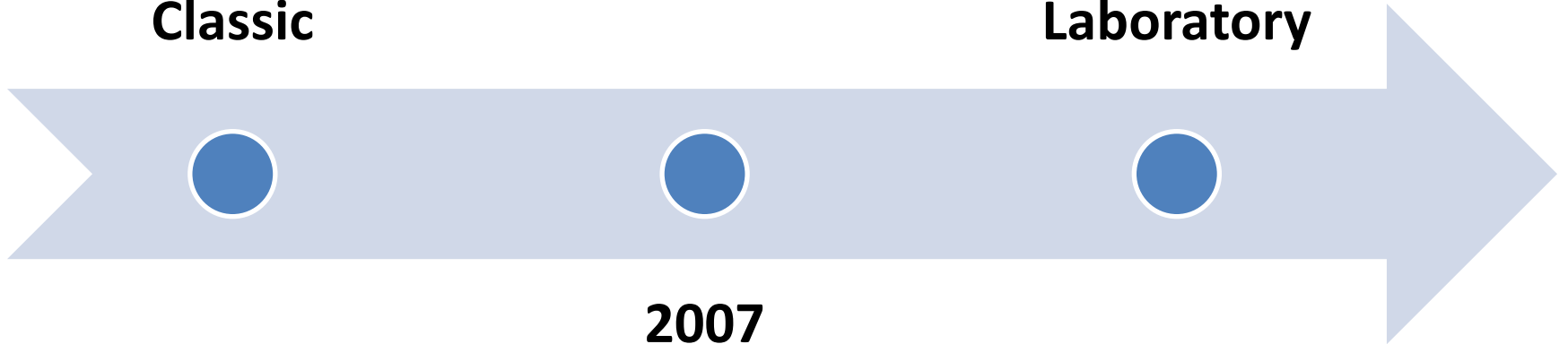
**Cerner
Classic**

2008

**Pathologists
Diagnostic
Laboratory**

2007

**Cerner
Millennium**



Interfaces in 2008

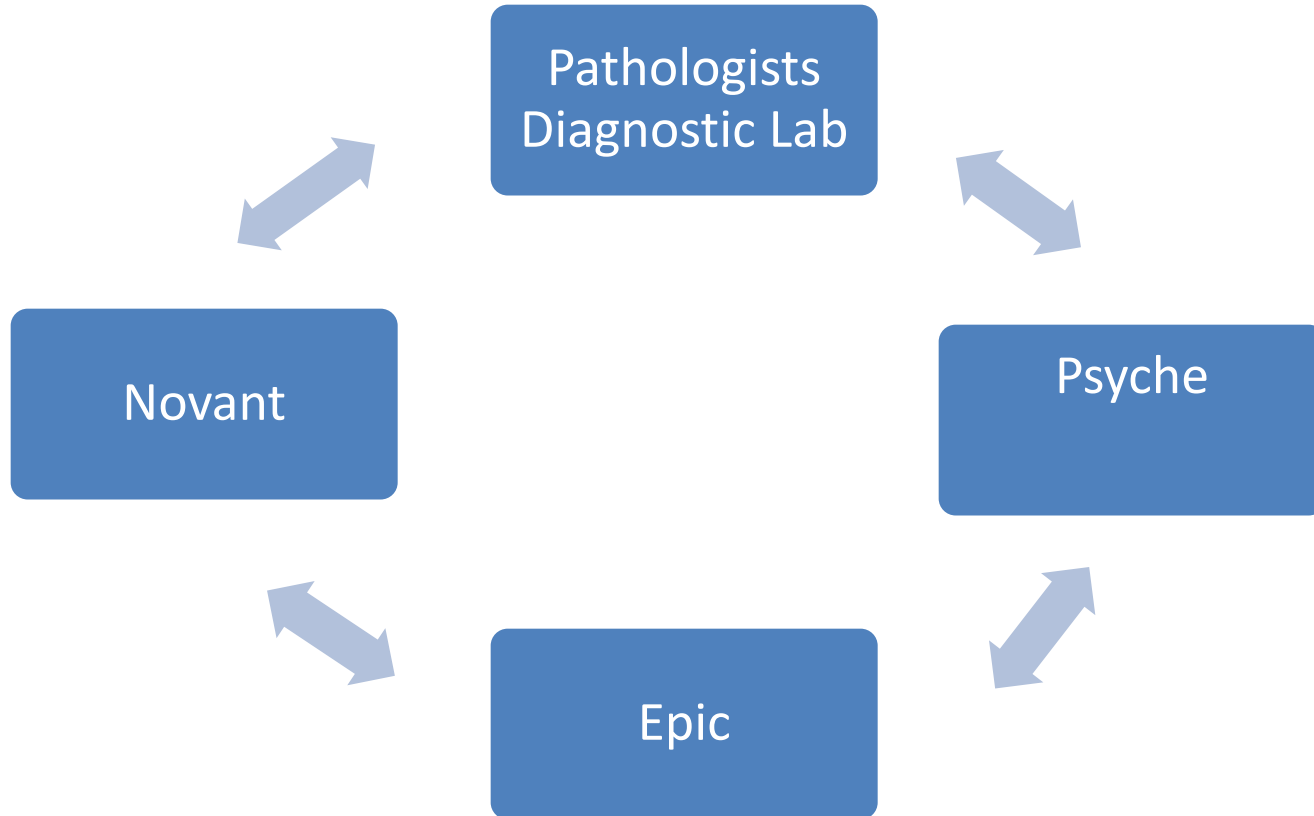
- Pathologists Diagnostic Laboratory had interfaces with Novant and PSA billing
- No client interfaces and a list of clients that were ready for interfaces with their EMR's
- Let the work begin!

2008 - Current Day

Three major commercial labs are located within 45 minutes of Winston-Salem.



The Players



Pathologists Diagnostic Laboratory

- Anatomic Pathology, Flow Cytometry and Cytology
- Serve 5 Novant hospitals and 2 independent hospitals
- 37 employees
- Pathologists Diagnostic Services (PDS)
 - 7 pathologists
- Cutaneous Pathology (CP)
 - 2 pathologists



PDL Information Technology Team

Julie Williams & Kevin Lipford

PDL Interfaces today

- Epic
- eClinicalworks
- Nextech
- Provation
- Digichart
- Allscripts
- Allscripts Myways
- Orchard
- Greenway
- eMD
- Suitemed
- AthenaHealth
- Modernizing Medicine



- Psyche Systems is focused exclusively on delivering laboratory software solutions to hospitals, clinics, reference and private labs for over 37 years.
- Psyche's software solutions include LIS software for clinical, anatomic pathology, microbiology and molecular labs as well as connectivity solutions for achieving Meaningful Use and fast, cost-effective growth such as Outreach and a suite of EMR connectivity solutions.
- Psyche's WindoPath LIS is consistently the top ranked best-of-breed AP system on the market.
- www.psychesystems.com

It is all about the partnership



Dear Lake Photography

Psyche's role

- WindoPath database is remote hosted
- Reliability –working relationship
- Ease of Use – Windopath & Outreach are user friendly and have met and exceeded our needs
- Development of products – client input
- Outreach and Outreach Manager evolved

Novant Health

- The system has 13 hospitals, more than 500 physicians clinics, outpatient surgery, imaging and diagnostic centers, rehabilitation programs and community health outreach programs.
- Novant employs 26,000 people and has more than 1,100 physicians in its medical group
- Novant needed an enterprise wide software solution

Epic would allow Novant to reach their goals...



Epic

- Founded in 1979, Epic is private and employee-owned. They develop, install and support all applications in-house.
- Epic's leadership team includes clinicians, developers and process experts – people deeply experienced in patient care and healthcare technology.
- The award-winning EpicCare EMR is known for being fast and physician-friendly

Presbyterian Pathology Group

- WindoPath site security feature
- PPG purchased Psyche WindoPath after trial period using PDL's database
- Team work on Epic interface
- Shared costs

Many EMR projects require that we ...



The Novant Plan

- Novant had hundreds of physician practices to bring up on Epic
- Scheduled live dates every other month with 20-30 practices each go live
- Started January 2012
- Last major 'go live' scheduled for July 2013
- One interface with Psyche that would split through Cloverleaf engine to PDL & PPG

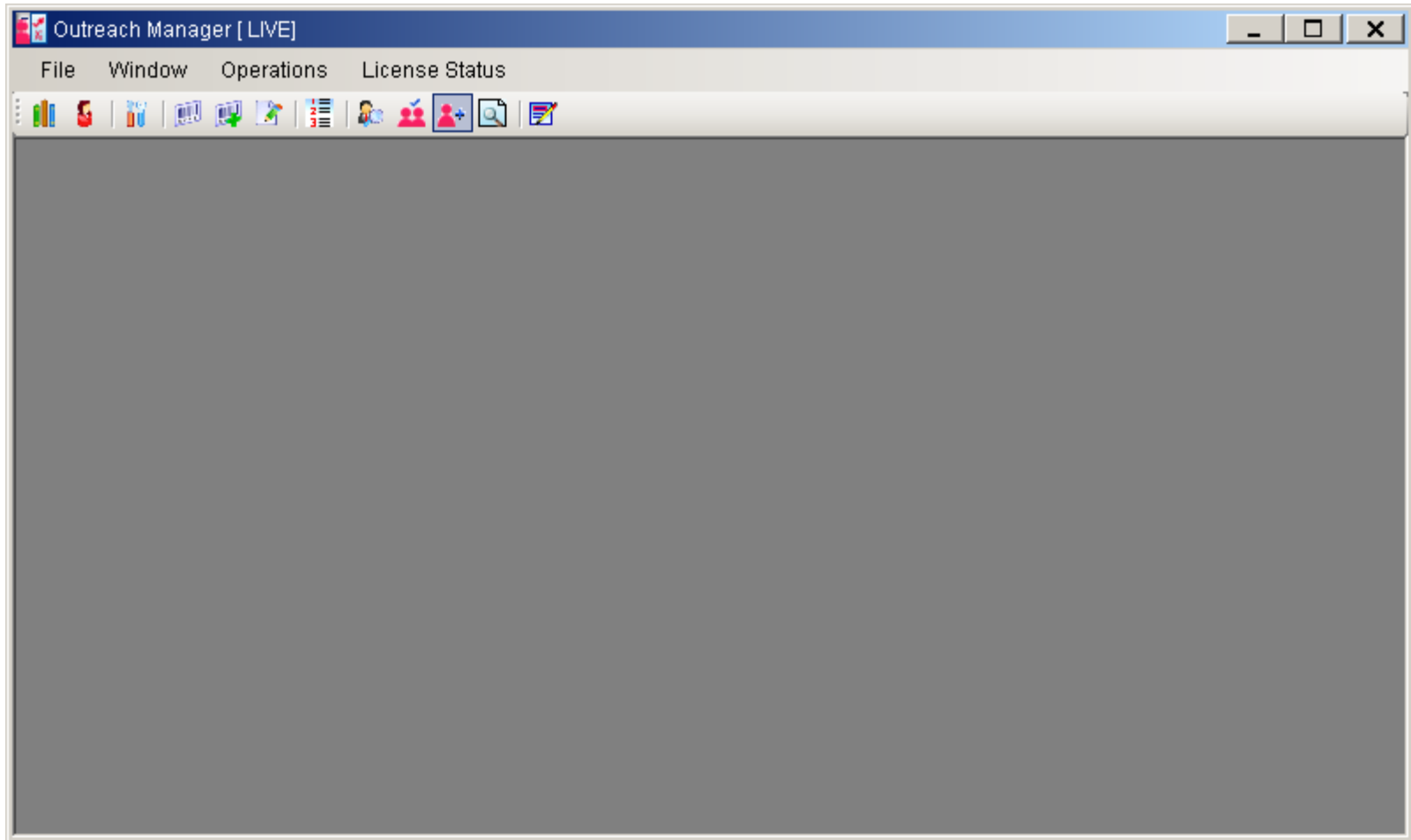
Psyche – Epic Interface

- Quotes –shared interface with PPG
- Kickoff call in Fall of 2011
- Connectivity
- Specifications
- Insurance Master for Import
- Build Phase
- “The Conference Call”
- Testing: Unit & Integration

What's involved?

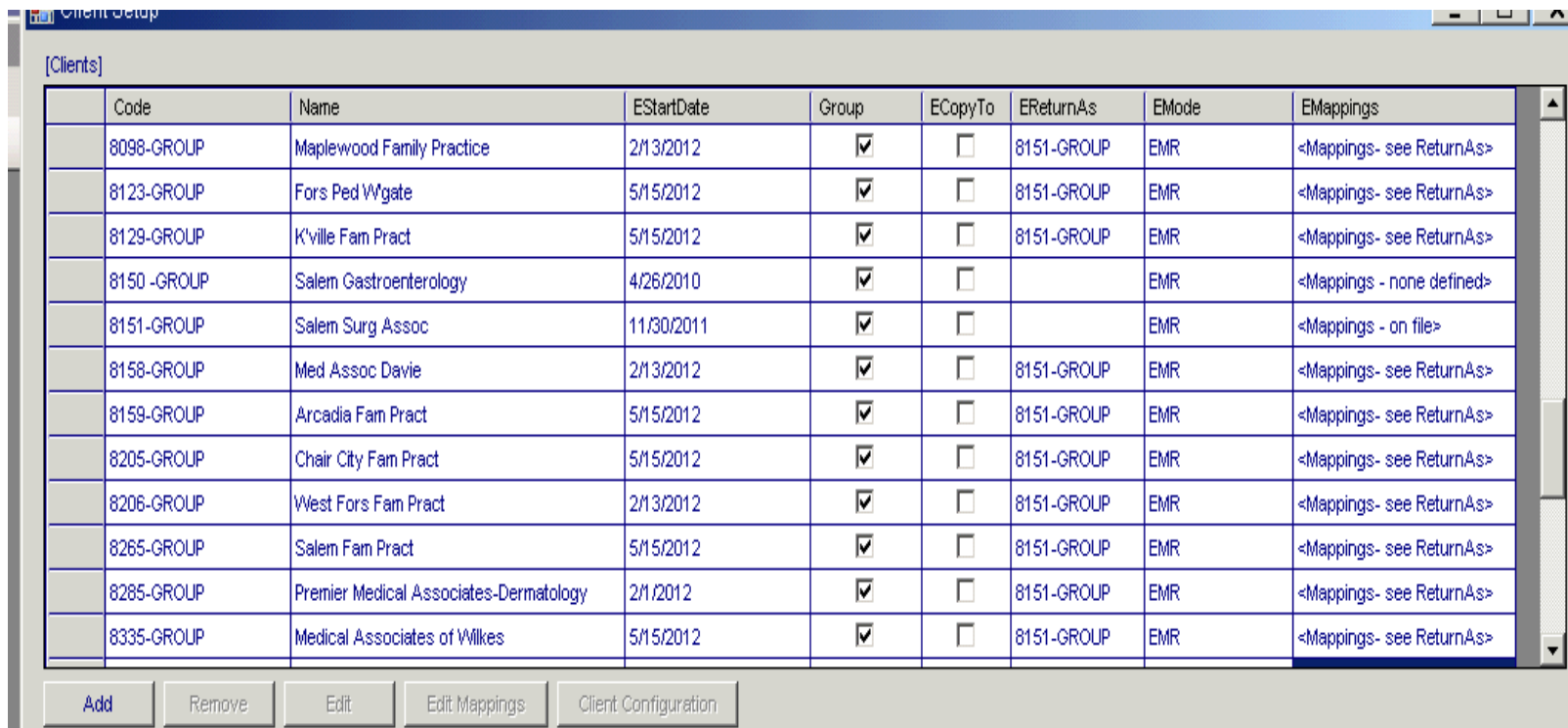
- How do we manage this interface?
- How do we build clients on to the interface?
- How do we maintain and monitor this interface?
- How do we handle > 60 clients to date on this one interface?
- Answer: Psyche's Outreach Manager

Outreach Manager



Psyche: Outreach Manager

- How it works



The screenshot shows a software window titled "Client Setup" with a sub-header "[Clients]". It contains a table with the following columns: Code, Name, EStartDate, Group, ECopyTo, EReturnAs, EMode, and EMappings. The table lists 13 client groups, each with a checked box in the "Group" column. Below the table are five buttons: "Add", "Remove", "Edit", "Edit Mappings", and "Client Configuration".

Code	Name	EStartDate	Group	ECopyTo	EReturnAs	EMode	EMappings
8098-GROUP	Maplewood Family Practice	2/13/2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8151-GROUP	EMR	<Mappings- see ReturnAs>
8123-GROUP	Fors Ped Wgate	5/15/2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8151-GROUP	EMR	<Mappings- see ReturnAs>
8129-GROUP	K'ville Fam Pract	5/15/2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8151-GROUP	EMR	<Mappings- see ReturnAs>
8150 -GROUP	Salem Gastroenterology	4/26/2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>		EMR	<Mappings - none defined>
8151-GROUP	Salem Surg Assoc	11/30/2011	<input checked="" type="checkbox"/>	<input type="checkbox"/>		EMR	<Mappings - on file>
8158-GROUP	Med Assoc Davie	2/13/2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8151-GROUP	EMR	<Mappings- see ReturnAs>
8159-GROUP	Arcadia Fam Pract	5/15/2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8151-GROUP	EMR	<Mappings- see ReturnAs>
8205-GROUP	Chair City Fam Pract	5/15/2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8151-GROUP	EMR	<Mappings- see ReturnAs>
8206-GROUP	West Fors Fam Pract	2/13/2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8151-GROUP	EMR	<Mappings- see ReturnAs>
8265-GROUP	Salem Fam Pract	5/15/2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8151-GROUP	EMR	<Mappings- see ReturnAs>
8285-GROUP	Premier Medical Associates-Dermatology	2/1/2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8151-GROUP	EMR	<Mappings- see ReturnAs>
8335-GROUP	Medical Associates of Wilkes	5/15/2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8151-GROUP	EMR	<Mappings- see ReturnAs>

Setting up new clients

- Add window



Select client, add start date and add to original interface code

Salem Gastroenterology	4/26/2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>		EMR	<Mapp
Salem Surg Assoc	11/30/2011	<input checked="" type="checkbox"/>	<input type="checkbox"/>		EMR	<Mapp
Med Assoc Davie	2/13/2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8151-GROUP	EMR	<Mapp
Arcadia Fam Pract	5/15/2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8151-GROUP	FMR	<Mapp

Code	Group	Name
7082-GROUP	true	Huntersville OBGYN Denver
7083	False	Huntersville OBGYN
7083-GROUP	true	Huntersville OBGYN
7084	false	Ronald W Logan DDS
7084-GROUP	true	Ronald W Logan DDS
7085	false	WSHC/Oncology Dept
7085-GROUP	true	WSHC/Oncology Dept
7086	false	Marc Silverstein, MD
7086-GROUP	true	Marc Silverstein, MD
7087	false	Piedmont Womens Healthcare
7088	false	Salem Vascular
7089	false	Dermatology, Laser & Vein Sp
7089-GROUP	true	Dermatology, Laser & Vein Sp
7090	false	Center For Assistive

WSHC/Oncology Dept 7085-GROUP	
EPassword	<input type="text"/>
EStartDate	2/12/2013
EReturnAs	8151-GROUP
EMode	EMR
ECopyTo	<input type="checkbox"/>
ECaseDocuments	<input type="checkbox"/>
<input type="button" value="Save"/>	

Carter, Monica	8895 office
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Add external – internal physician codes

I2550	DSH132	101047
I3905	DSH137	101405
I3988	DSH140	101409
I4630	DSH150	101088
I4630	DSH161	101107
I4630	DSH25	101040
I4630	DSH62	101070

New

Errors

Status: Ready

ExternalCode

NEW

InterfaceMap

ConnectionCode*	8151-GROUP
MappingType*	PHY
InternalCode*	102103
ExternalCode*	1639130891
Description	
Discrete	False
MapMode	EMR
Retired	False

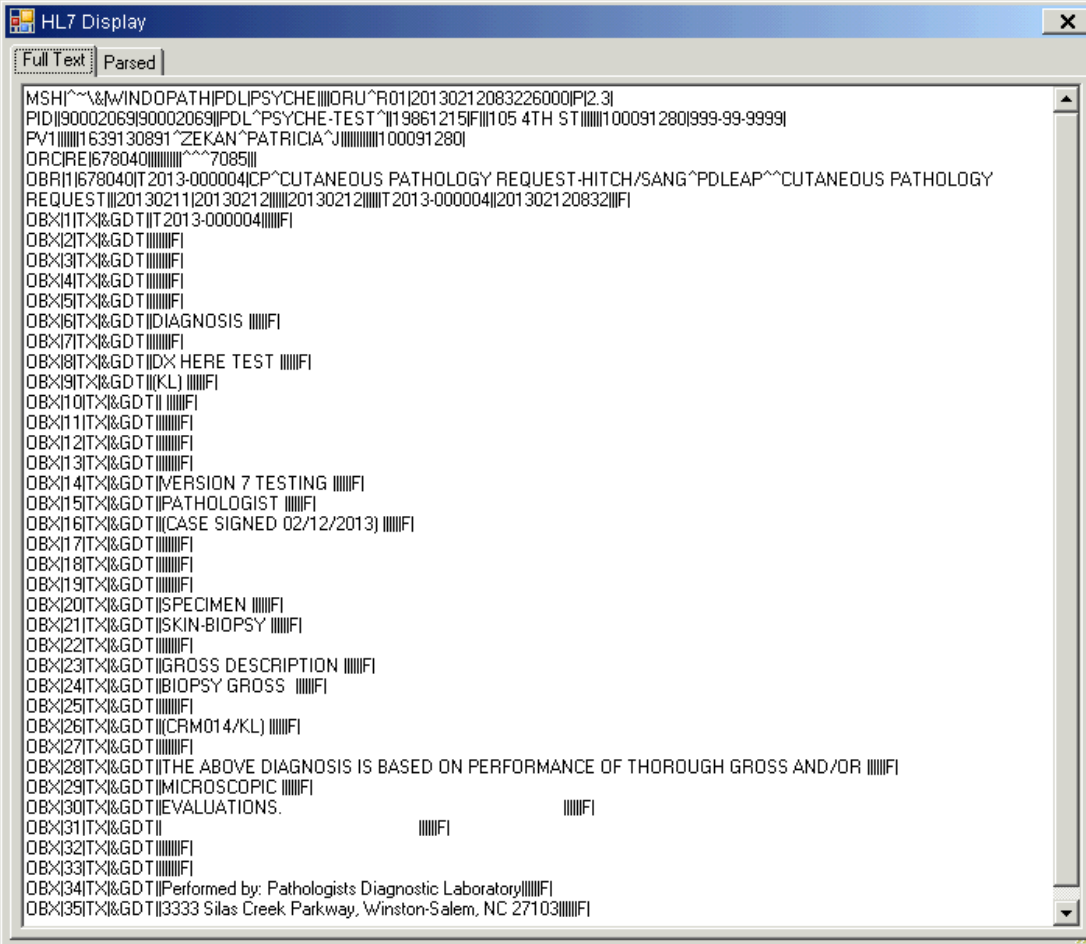
Save Cancel

New

DONE!!!

That's it!

Outreach Manager: HL7



```
MSH|^~\&WINDOPATHIPDLIPSYCHE|||ORU^R01|20130212083226000|P12.3|
PID|90002069|90002069|PDL^PSYCHE-TEST^|19861215F||105 4TH ST|||100091280|999-99-9999|
PV1|||1639130891^ZEKAN^PATRICIA^J|||100091280|
ORC|RE|678040|||7085||
OBR|1|678040|I|2013-000004|CP^CUTANEOUS PATHOLOGY REQUEST-HITCH/SANG^PDLEAP^CUTANEOUS PATHOLOGY
REQUEST||20130211|20130212|||20130212|||T|2013-000004|201302120832||F|
OBX|1|I|X|GDT|I|2013-000004|||F|
OBX|2|I|X|GDT|I|||F|
OBX|3|I|X|GDT|I|||F|
OBX|4|I|X|GDT|I|||F|
OBX|5|I|X|GDT|I|||F|
OBX|6|I|X|GDT|I|DIAGNOSIS |||F|
OBX|7|I|X|GDT|I|||F|
OBX|8|I|X|GDT|I|DX HERE TEST |||F|
OBX|9|I|X|GDT|I|(KL) |||F|
OBX|10|I|X|GDT|I|||F|
OBX|11|I|X|GDT|I|||F|
OBX|12|I|X|GDT|I|||F|
OBX|13|I|X|GDT|I|||F|
OBX|14|I|X|GDT|I|VERSION 7 TESTING |||F|
OBX|15|I|X|GDT|I|PATHOLOGIST |||F|
OBX|16|I|X|GDT|I|CASE SIGNED 02/12/2013) |||F|
OBX|17|I|X|GDT|I|||F|
OBX|18|I|X|GDT|I|||F|
OBX|19|I|X|GDT|I|||F|
OBX|20|I|X|GDT|I|SPECIMEN |||F|
OBX|21|I|X|GDT|I|SKIN-BIOPSY |||F|
OBX|22|I|X|GDT|I|||F|
OBX|23|I|X|GDT|I|GROSS DESCRIPTION |||F|
OBX|24|I|X|GDT|I|BIOPSY GROSS |||F|
OBX|25|I|X|GDT|I|||F|
OBX|26|I|X|GDT|I|(CRM014, KL) |||F|
OBX|27|I|X|GDT|I|||F|
OBX|28|I|X|GDT|I|THE ABOVE DIAGNOSIS IS BASED ON PERFORMANCE OF THOROUGH GROSS AND/OR |||F|
OBX|29|I|X|GDT|I|MICROSCOPIC |||F|
OBX|30|I|X|GDT|I|EVALUATIONS. |||F|
OBX|31|I|X|GDT|I|||F|
OBX|32|I|X|GDT|I|||F|
OBX|33|I|X|GDT|I|||F|
OBX|34|I|X|GDT|I|Performed by: Pathologists Diagnostic Laboratory|||F|
OBX|35|I|X|GDT|I|3333 Silas Creek Parkway, Winston-Salem, NC 27103|||F|
```

Outreach Manager: HL7 parsed

HL7 Display

Full Text | **Parsed**

0	1	2	3	4	5	6
MSH	^~\&	WINDOPATH	PDL	PSYCHE		
PID		90002069	90002069		PDL^PSYCHE-...	
PV1						
ORC	RE	678040				
OBR	1	678040	T2013-000004	CP^CUTANEO...		
OBX	1	TX	&GDT		T2013-000004	
OBX	2	TX	&GDT			
OBX	3	TX	&GDT			
OBX	4	TX	&GDT			
OBX	5	TX	&GDT			

Segment	Value
0	MSH
1	^~\&
2	WINDOPATH
3	PDL
4	PSYCHE
5	
6	
7	
8	ORU^R01
9	20130212083226000
10	P
11	2.3
12	

Novant Epic Ambulatory Stats

- 352 clinics live on PM (1461 Providers)
- 247 clinics live on EHC (893 Providers)
- >12,000 average daily patient encounters
- Over 120,000 MyChart users
- >4500 concurrent users
- 113,912 cumulative training hours
- Initial rollout to be completed July, 2013

Lessons Learned

The Positives:

- Psyche designed the interface to easily add clients
- One day intense “all hands on deck” testing
- One interface, one quote for > 60 clients

The ‘not so’ positives:

- Training should be designed to include all types of orders, both clinical lab and Anatomic Pathology orders.
- Set up template for testing after upgrades or seek therapy!

Therapy



Future

- Final Novant Medical Group offices
- Novant Community Connect
- Epic Acute rollout

Summary

- History of the Project
- Build, Design & Implementation
- Future of the project
- How the project has boosted our local Pathology group



Cast

**Sherman & Murphy
Williams**



Happy Birthday Mom!
To another year of swinging!

Q & A ?

Julie Williams

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