

CareConnect Bake-Off:

System Integration, no Standardization

CNIA Conference 2005

Presented by Chris Clement RN, BScN



Vancouver Coastal Health
Promoting wellness. Ensuring care.





VCH Demographics

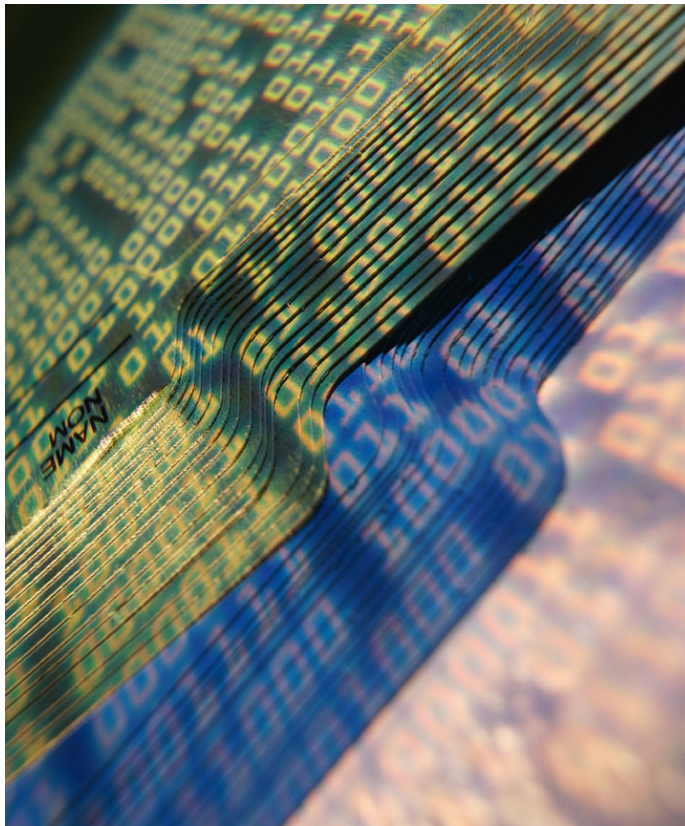
- Acute care is provided in our 14 hospitals and two diagnostic treatment centres.
- Population served: 1,003,150 (25% of BC's population)
- VCH is primarily affiliated with the University of British Columbia and through various programs and services, also associated with numerous provincial, national and international academic institutions.





CareConnect Mission

- To implement the Vancouver Coastal / PHC Electronic Health Records (EHR) strategy.





EHR Definition

From BC EHR Working Group:

- The EHR is not so much a physical entity, data repository or application as it is a capacity to bring pertinent information together in a way that is meaningful for a provider in their care setting.





EHR Business Drivers

Why are we doing this?

- An integrated regional EHR is a critical prerequisite to VCH's health system integration strategies and will enable the timely sharing of clinical data
 - between entities, networks, programs and HA's
- Also enables improved patient safety between entities, networks, programs and HA's
 - better access to patient information
- And enables improved patient flow
 - faster decision making through improved information access i.e. patient centric view & single sign on.





Care Connect Phase 2 Mission

- To advance the VCH/PHC electronic health records strategy by ***piloting*** a number of complementary approaches to providing caregivers with enhanced, integrated, secure access to clinical information throughout VCH/PHC and, in some cases, other health authorities.





Project Objectives

- To help make informed technology decisions
- To demonstrate real clinical value and potential
- To develop business cases for follow on initiatives

Putting technology into production is not a CC2 objective





CareConnect Overview

Project scope



- *Diagnostic Image Sharing*
- *Thin Client, X-Site HIS Access*
- *Visual integration / Context Management*
- *Secure remote access to HIS / RIS*
- *Secure desktop sharing*
- *Clinical Portal / Patient Encounter Index*





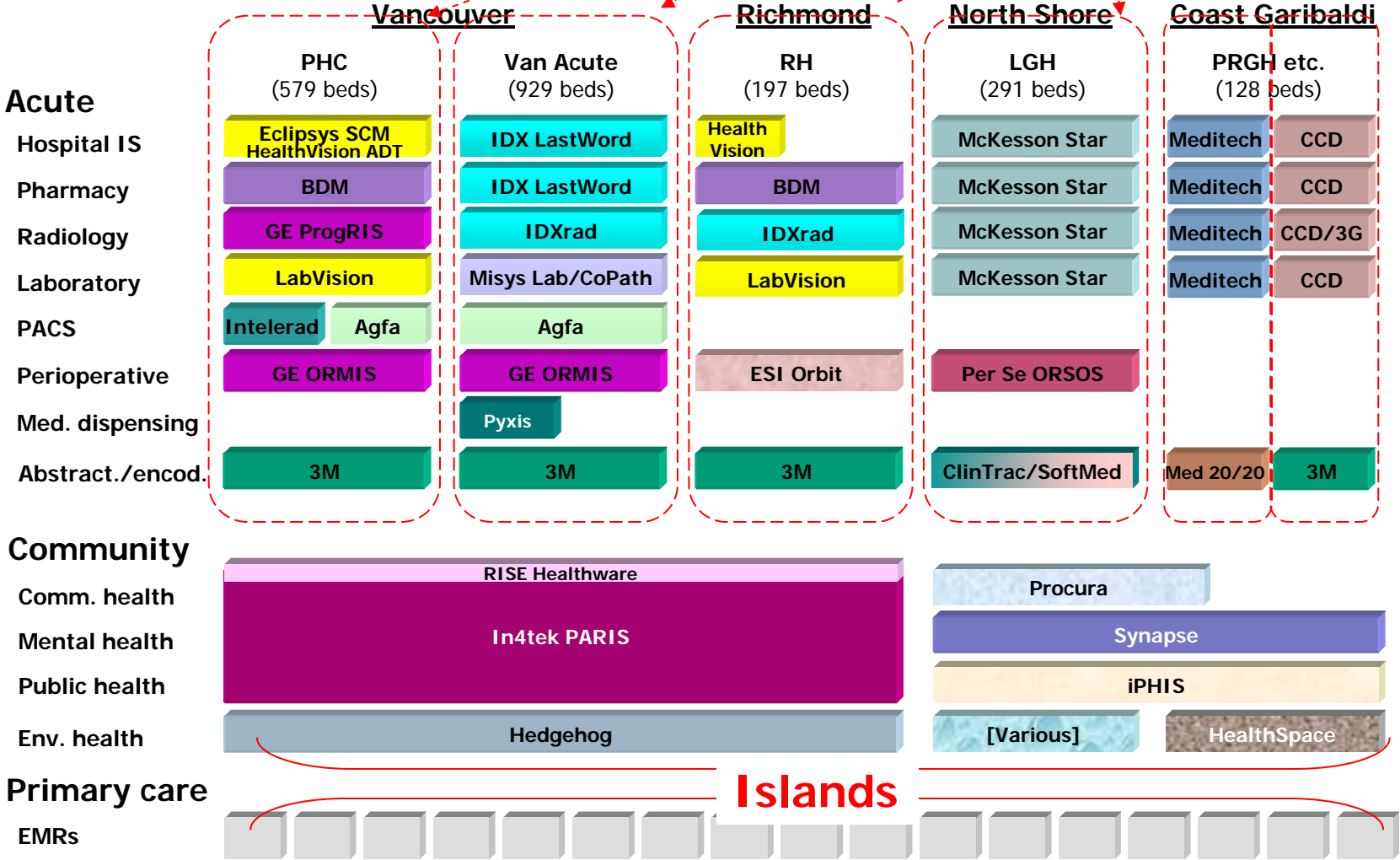
Current Situation

- Many different clinical systems
- Lack of cross site, cross program, cross network access to patient data
- Little ability to share clinical information
- Lack of a “patient centric” view of information
- Inconsistent data standards and business rules
- **Silos & islands of clinical information**



Silos

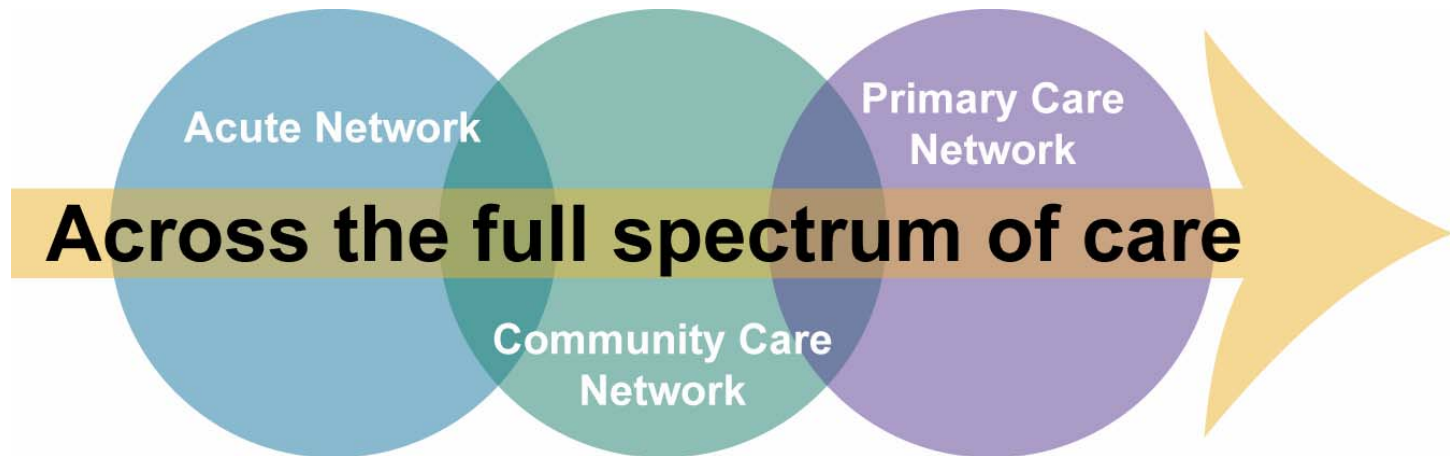
Current situation





CareConnect Objectives

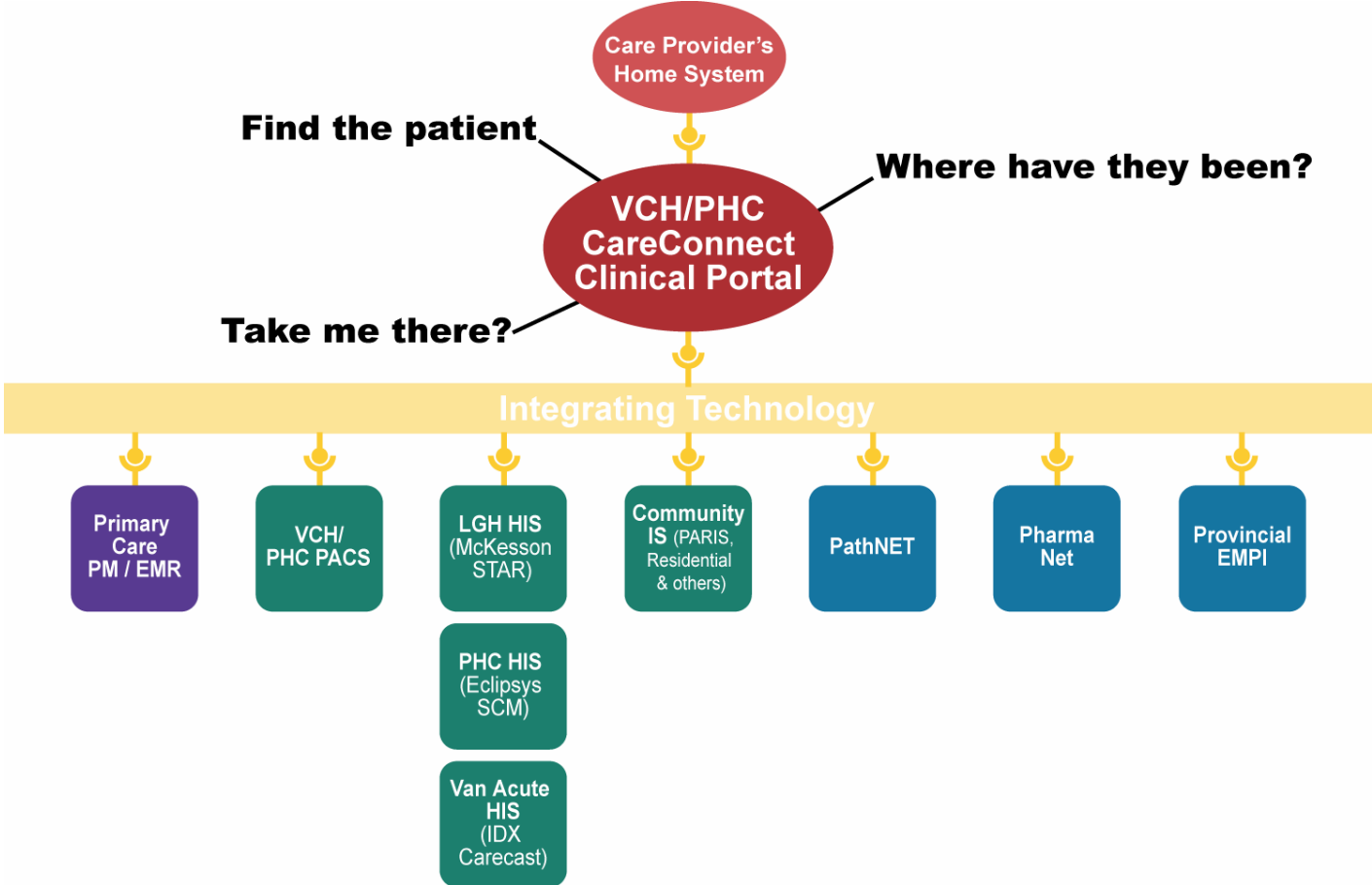
Process Scope





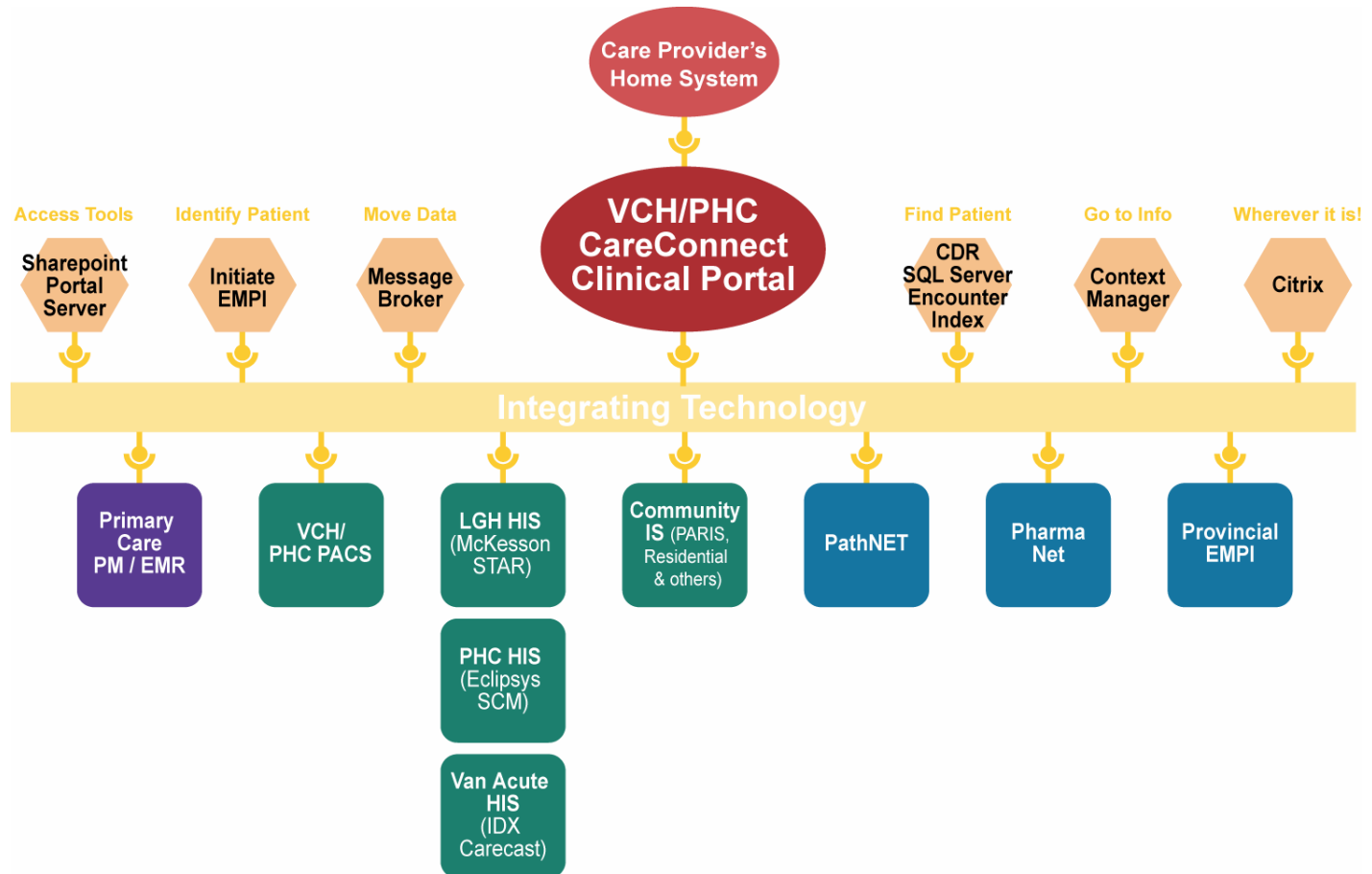
Technology Scope (Stage 1)

VCH care provider



Version 1.0

CareConnect & Enabling Technology



Logon to Desktop - Vergence Authenticator

Authenticator



Please enter valid user credentials for the system.

User name:

Password:

Log on to:



Patient Search

mwise
 Help
 Logout
 Patients
 Patient Search
 Common

Search Fields

PHN	<input type="text" value="6046046044"/>	Given Name	<input type="text"/>
Family Name	<input type="text"/>	Gender	<input type="radio"/> Male <input type="radio"/> Female <input type="radio"/> Other
Date of Birth	<input type="text"/>		
Favourite Searches	<input type="text" value="<none>"/>	<input type="button" value="Reset"/> <input type="button" value="Search"/>	

Enter search criteria above and hit Search

CONCERTO

Vancouver Coastal Health
 Promoting excellent healthcare

mwise
 Help
 Logout

Patients

Patient Search
 Common

Home
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Patient Details

PHN	6046046044		
MRN	0670300	Last Known Address	
Organization	LGH	937 GREAT ROAD	
Name	Perfect, Violet	SMALLVILLE	
Age	57 years	BC	
Date of Birth	07-Jan-1948	CA	
Gender	Female		

Contributing Systems and Patient Variations

Organization	Name	Gender	Age	MRN	Exclude
LGH	Perfect, Violet	F	57 years	0670300	<input type="checkbox"/>
PHC	Perfect, Viola (!)	F	57 years	010128148	<input type="checkbox"/>
Van Acute	Perfect, Viola (!)	F	57 years	04027440	<input type="checkbox"/>
Van/Rich Comm	Perfect, Viola (!)	M (!)	58 years (!)	96516	<input type="checkbox"/>

Include Visits

Encounter List

Organization	Admission Date	Discharge Date	Facility	Service	Clinician	Reason	Encounter Number	Type
LGH	09-Sep-2004 15:37	14-Sep-2004 14:12	LGH	Cardiac Care	Mayo, Dr. W.	Chest Pains / MI	0000001	Encounter
LGH	25-Sep-2004 22:54	27-Sep-2004 10:12	LGH	ED	Williams, Dr. N	Chest Pains / SOB	0000002	Encounter
Van Acute	27-Sep-2004 11:30	27-Sep-2004 17:30	Vancouver General Hospital	CCU	BERNSTEIN, Victoria	Cardiac Cath; MYOCARDIAL INFARCT NOS	42785	Encounter
LGH	27-Sep-2004 18:56	30-Sep-2004 13:18	LGH	CCU	Mayo, Dr. W.	CAD	0000004	Encounter
PHC	10-Oct-2004 08:00	10-Oct-2004 11:12	Heart Center Program	SURGERY	Ling, Dr. Hilton	SURGICAL CONSULT	0003	Encounter
PHC	08-Nov-2004 11:12	18-Nov-2004 11:14	Heart Center Program	SURGERY	Ling, Dr. Hilton	CAD	0004	Encounter
Van/Rich Comm	01-Dec-2004 09:45		Adult / Older Adult	Home Care	Caldwell, Dr. Simon	Post-Surgical Follow-up	0000007	Encounter
Van/Rich Comm	02-Dec-2004 10:36		Adult / Older Adult	Home Care	Caldwell, Dr. Simon	Post-Surgical Follow-up	0000008	Encounter
Van Acute	05-Dec-2004 11:39	31-Mar-2005 00:00	Vancouver General Hospital	NPH	MAST, W. (*)	Ren Renal Failure	42786	Encounter
LGH	15-Dec-2004 20:23		LGH	Cardio	Mayo, Dr. W.	Heart Racing	0000012	Encounter

Printer friendly version

PERFECT, VIOLA - Sunrise Clinical Manager

File Registration Edit View GoTo Actions Preferences Tools Clinical Link Help



PERFECT, VIOLA 010128148 / 0004
 SPH-5A-5007-2

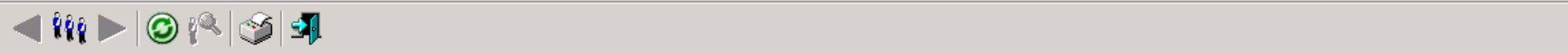
Patient List Orders Results Patient Info Summary Documents Med. Profile Discharge Summary

Current List: 2 Visit(s)

Patient Name	Assigned Location	Provider	Patient ID / Visit Number
PERFECT, VIOLA	SPH-5A-5007-2		010128148/0004
PERFECT, VIOLA	SPH-Surgical DayCare (SDC)		010128148/0003

PERFECT, VIOLA - Sunrise Clinical Manager

File Registration Edit View GoTo Actions Preferences Tools Clinical Link Help



PERFECT, VIOLA 010128148 / 0004
 SPH-5A-5007-2

[Patient List](#)
[Orders](#)
[Results](#)
[Patient Info](#)
[Summary](#)
[Documents](#)
[Med. Profile](#)
[Discharge Summary](#)

Active Health Issues

Type	Health Issue	Onset Date	Entered Date
Admitting	CAD		07-Jan-05 1436

Active Allergies

Type	Allergy	Reaction	Entered Date
X	CHECK ALLERGIES ON ...	zReserved	23-Dec-04 1019

Active Providers

Role	Name	Phone	Entered Date
Attending MD	Ling, Hilton		07-Jan-05 1113
Family MD	Buchan, James Kennedy		07-Jan-05 1113

Active Alerts

Type	Alert	Entered Date
------	-------	--------------

PERFECT, VIOLA
 Select Patient Patient
 MRN: 04027440 Sex: F
 DOB: 10Apr1924 Age: 81 Years
 UPI: 00000657



Current Patient List: Hotlist

MRN	Patient Name	Other Information

Select Remove Add Active Find.. Temp List Print List Refresh

Patient List Directory

Freq Folder Avail

List Name	Type	Owner
Hotlist ♥		

Select Make Default Make Freq Move/Remove

Reserved for Future Use

Please "REFRESH" current Patient List to capture changes

Command Central

Command: PTPTR
 MRN: 4027440
 Acct #:

Personal Options

Global Name Lookup

PERFECT, VIOLA
MRN: 04027440
Sex: F
DOB: 10Apr1924
Age: 81 Years
UPI: 00000657

Select Patient Patient Info



Review Patient Demographics

Patient Information

Last Name: PERFECT
 First: Viola MI:
 DOB: 10Apr1924 Sex: F
 PHN:
 Soc Ins #:
 Birth Name:
 M. Maiden Name:
 Registration Update Alias?
 Date of BC Residence:
 Date at Current Address:
Permanent Home Address
 Street: 937 Great Road

 City: smallville
 Prov: BC Postal Code:
 Country:

 Day Phone:
 Night Phone:

Demographic

Marital:
 Religion:
 Disability:
 Language:

Previous Address 1

Street:
 City:
 Prov: Postal Code:

Temporary Address

Street:
 City:
 Prov: Postal Code:
 Phone:

Care Provider

Family Prov:
 Specialty Prov 1:
 Specialty Prov 2:
 Referring Agency:

Unregistered Referral

Last Name:
 First Name: MI:

Flags

Foundation: N UR:
 Debt:
 Do Not Announce? Program:
 Adv Directive: IFD: N

Comment:

Alert Information

Alert: Comment:

Folder:
 Alt. Patient No:

* Richmond use only
 RHS HRN: *

MENU

Historical Results for: PERFECT, VIOLA DOB: Apr 10 1924 PHN: BC-6046046044 Close

- Inbox
- Print ▶
- Reprint
- Patient ▶
- PharmaNet ▶
- Options ▶
- Referrals

Filter dates: Previous Visits:
 Days:
 Date Range: Start date: End date:
 Patient's tests within select date range: Total records retrieved: 1

<input type="checkbox"/>	Collection Date Time	Section Description	Reported By	Status
<input type="checkbox"/>	2004-11-19 10:49	HAEM	BCB	F

MENU

View Reports: PERFECT, VIOLA DOB: Apr 10 1924 PHN: 6046046044

- Inbox**
- Print** ▶
- Reprint
- Patient** ▶
- PharmaNet ▶
- Options** ▶
- Referrals

Report: 1 of 1

Show Patient Details

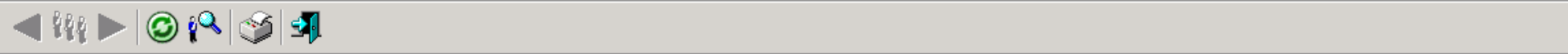
Patient:	PERFECT, VIOLA	Phone:	604-123-1234	Lab No:	T04-111111
PHN:	6046046044 BC	Sex:	F	Patient ID:	
Age:	80 years	Referring Site ID:		Reported by:	BC Bio (604-507-5070)
DOB:	Apr 10 1924				
Collected on:	Nov 19 2004 10:49				
Reported on:	Nov 19 2004 10:52				
Ordered by:	MEDIC Dr. IAN				
CC:					

	Flags	Results	Reference Range
Coagulation Studies			
INR	L	1.9	2.0 - 3.0

FINAL RESULTS

PERFECT, VIOLA - Sunrise Clinical Manager

File Registration Edit View GoTo Actions Preferences Tools Clinical Link Help

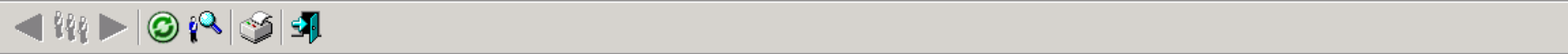


PERFECT, VIOLA 010128148 / 0004 57y Female
 SPH-5A-5007-2 Ling, Hilton

Patient List Orders Results Patient Info Summary Documents Med. Profile Discharge Summary

Current List: 2 Visit(s)

Patient Name	Assigned Location	Provider	Patient ID / Visit Number
PERFECT, VIOLA	SPH-5A-5007-2	Ling, Hilton	010128148/0004
PERFECT, VIOLA	SPH-Surgical DayCare (SDC)	Ling, Hilton	010128148/0003



PERFECT, VIOLA 010128148 / 0004 57y Female
 SPH-5A-5007-2 Ling, Hilton

Patient List Orders Results Patient Info Summary Document

Current List:

Patient Name	Assigned Location	Pr
PERFECT, VIOLA	SPH-5A-5007-2	Lin
PERFECT, VIOLA	SPH-Surgical DayCare (SDC)	Lin

Find Patient X

Name Identification Provider Other Search

Enter full or partial criteria, then start Search...

Last:
 Given:

Find similar sounding last names

Gender:

Include patients with highest privacy level

Search Results:

Name	Gender	Birth Date	Deceased Date
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PERFECT, VIOLA - Sunrise Clinical Manager

File Registration Edit View GoTo Actions Preferences Tools Clinical Link Help



PERFECT, VIOLA 010128148 / 0004 57y Female
 SPH-5A-5007-2 Ling, Hilton

Patient List Orders Results Patient Info Summary Document

Current List: Clinical Link (Temporary)

Find Patient [X]

Name Identification Provider Other

Enter full or partial criteria, then start Search...

Last:

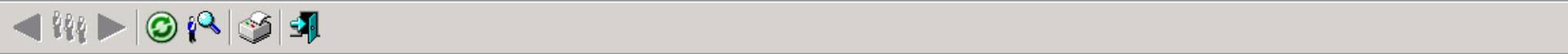
Patient Name	Assigned
PERFECT, VIOLA	SPH-5A-5007-2
PERFECT, VIOLA	SPH-5A-5007-2

Show Visits [X]

Admit Date	Type / Care Level	Location	Visit Status	Name
23-Dec-04	Inpatient/Acute Care	SPH-10B-1015-1	ADM	TESTTWO, PACS PATIENT
20-Aug-04	Outpatient/Emergency	SPH-ED FastTrack-FSTR-3	DSC	TESTTWO, PACS PATIENT

TESTTWO, PACS PATIENT - Sunrise Clinical Manager

File Registration Edit View GoTo Actions Preferences Tools Clinical Link Help

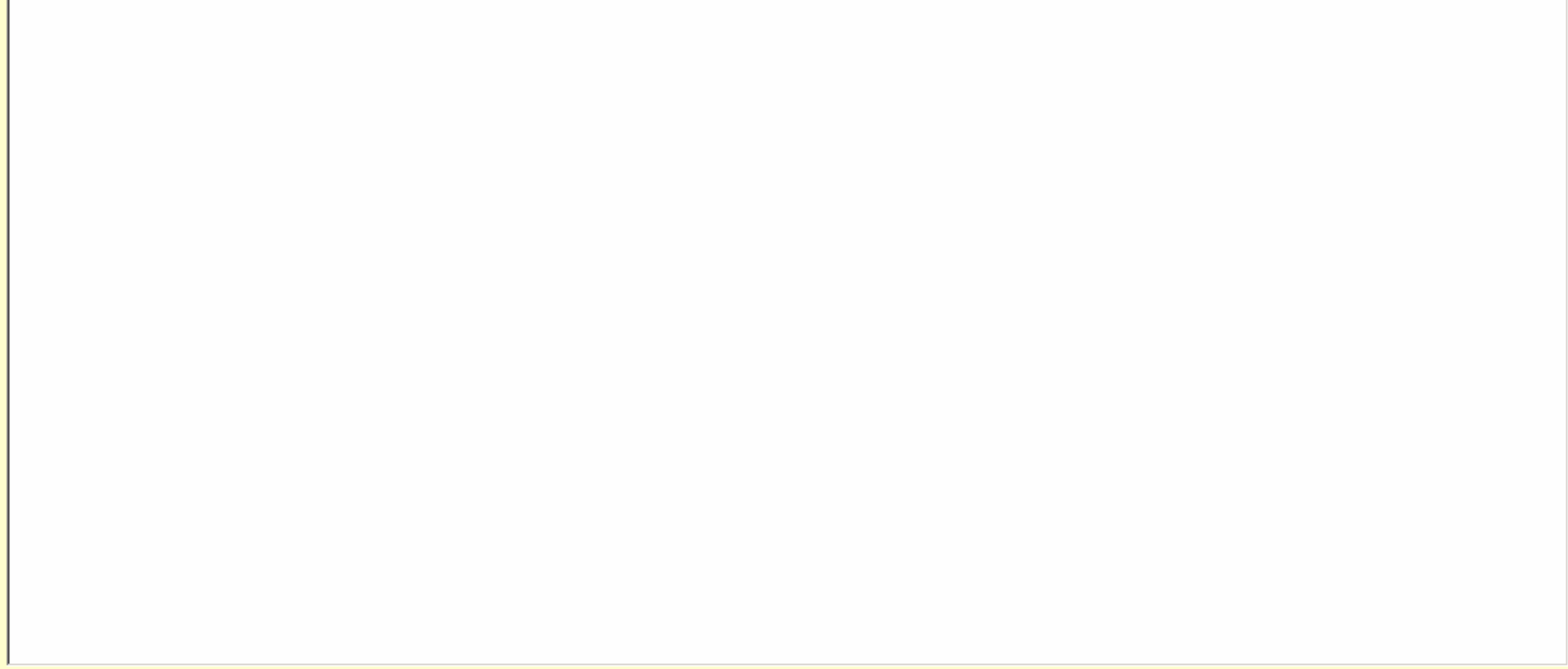


TESTTWO, PACS PATIENT 010125763 / 0002 68y Male
 SPH-10B-1015-1 Frinton, Vera Margarethe

[Patient List](#) [Orders](#) [Results](#) [Patient Info](#) [Summary](#) [Documents](#) [Med. Profile](#) [Discharge Summary](#)

Current List: 1 Visit(s)

Patient Name	Assigned Location	Provider	Flag New	Unack Alerts	New Results	New Orders	New Document	To Sign	Unavailable
TESTTWO, PACS PATIENT	SPH-10B-1015-1	Frinton, Vera Margarethe							



mwise
 Help
 Logout

Patients
 Patient Search
 Common

Home
 Autohide

Patient Details

PHN	9183757683		
MRN	0670100	Last Known Address	
Organization	LGH	123 45 ST.	
Name	Test 2, Pacs Patient	ANYTOWN	
Age	68 years	BC	
Date of Birth	15-Jan-1937		
Gender	Male		

Contributing Systems and Patient Variations

Organization	Name	Gender	Age	MRN	Exclude
LGH	Test 2, Pacs Patient	M	68 years	0670100	<input type="checkbox"/>
PHC	Testtwo, Pacs Patient (!)	M	68 years	010125763	<input type="checkbox"/>
Van Acute	Test 2, PACS PATIENT	M	68 years	00100001	<input type="checkbox"/>
VanRich Comm	Test 2, Pacs Patient	M	69 years (!)	9998	<input type="checkbox"/>

Include Visits

Encounter List

Organization	Admission Date	Discharge Date	Facility	Service	Clinician	Reason	Encounter Number	Type
LGH	17-Nov-2003 16:10	15-Mar-2004 15:27	LGH	ORTHOAEDICS		# LEFT FEMUR	03000002	Encounter
PHC	20-Aug-2004 00:00	27-Aug-2004 00:00	EMERGENCY	SPH EMERGENCY	Innes, Grant Douglas (*)	BROKEN SKULL	0001	Encounter
PHC	23-Dec-2004 00:00		SURGERY PROGRAM	GYNECOLOGY	Frinton, Vera Margarethe (*)	TEST PATIENT NUMBER 2	0002	Encounter
Van Acute	30-Dec-2004 00:00	31-Mar-2005 00:00	VGH	LAB	Bernstein, Victoria	LAB OP Walk-in	22020	Encounter
Van Acute	30-Dec-2004 00:00				Bernstein, Victoria	LAB OP Walk-in	22020200412300000	Visit
Van Acute	03-Jan-2005 00:00	31-Mar-2005 00:00	VGH	CAR	Bernstein, Victoria	HH Cardiac Rehab	22019	Encounter
Van Acute	03-Jan-2005 00:00				Bernstein, Victoria	HH Cardiac Rehab	22019200501030000	Visit

WEB1000 - Vergence Patient Link On

Study
Thumbnail
Image
Report
Conference

WEB1000



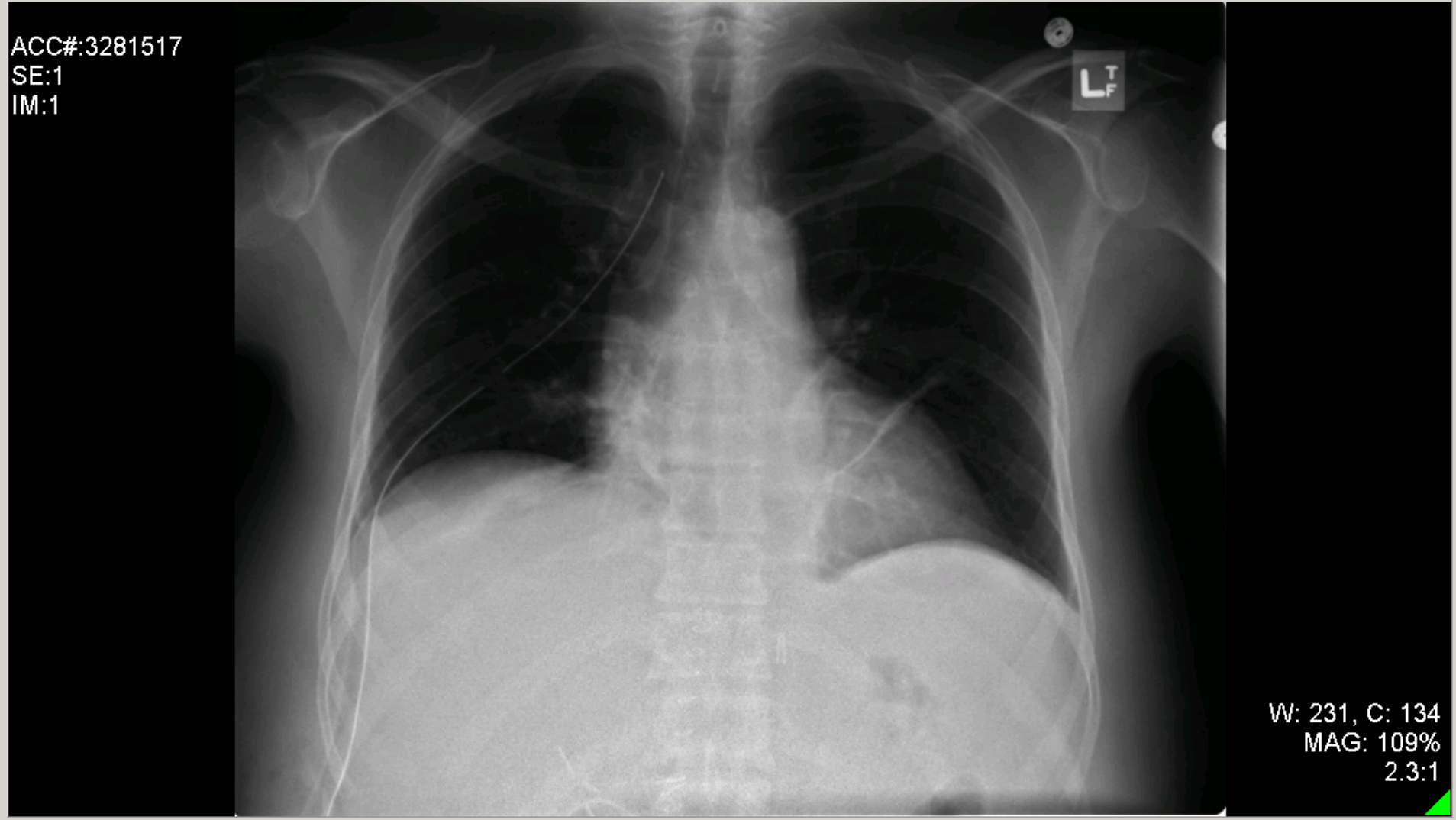
Location: Patient ID: Search Criterion 2: Search Criterion 3: Search Criterion 4: Search Criterion 5:
 All locations: 100001

CR today

Patient Name	Patient ID	Accession Number	Study Date	Study Time	Study Description	Referring Physician	Images	Study Comment	Reason Fo
VGHTESTTWO, REG	100001								
VGHTESTTWO, REC	100001	4129240	08-Jul-2004	11:45:00 PM	RCHCHEST	ABBOUD, RAJA T. (MD)	?	S	
VGHTESTTWO, REC	100001	3308857	20-Jun-2002	10:44:55 AM	RCH/ZNOBILLCHES1	RADIOLOGY, ANALYST	2	S	
VGHTESTTWO, REC	100001	3291280	04-Jun-2002	9:31:46 AM	RCH/ZNOBILL/PCHE	RADIOLOGY, ANALYST	1		
VGHTESTTWO, REC	100001	3291279	04-Jun-2002	9:19:43 AM	RABM/ZNOBILL/IPABI	RADIOLOGY, ANALYST	16	S	
VGHTESTTWO, REC	100001	3284052	28-May-2002	10:41:54 AM	RWR/ZNOBILL/ER/Rv	RADIOLOGY, ANALYST	1		
VGHTESTTWO, REC	100001	3284053	28-May-2002	11:05:13 AM	REXUA/ZNOBILL/ER#	RADIOLOGY, ANALYST	1		
VGHTESTTWO, REC	100001	3281506	25-May-2002	12:09:19 AM	RSH/L/ZNOBILL/SHOI	RADIOLOGY, ANALYST	1		
VGHTESTTWO, REC	100001	3281510	25-May-2002	12:23:09 AM	RSH/L/ZNOBILL/ERS	RADIOLOGY, ANALYST	1		
VGHTESTTWO, REC	100001	3281517	25-May-2002	12:32:42 AM	RHIP/ZNOBILL/ERHIF	RADIOLOGY, ANALYST	15		

Study: VGHTESTTWO, REG | Thumbnail | Image | Report | Conference

1 | [Navigation icons] | [Zoom icons] | [Tools icons]




Log Off Help


MENU Search for Patients Close

- Inbox
- Print ▶
- Reprint
- Patient ▶
- PharmaNet ▶
- Options ▶
- Referrals

Include the following database(s) in the search:

Launchpad
 PharmaNet / Client Registry (MP)
 Search Clear

PHN	Last Name	First Name	Date of Birth	Sex
BC-9183757683	TEST2 PATIENT	PACS	1937-01-15	M

Enter PHN number with or without province (e.g. 912345678 or AB-123456789)

For selected patient:
Diagnostic Reports
PharmaNet





● Issues/Challenges Identified in the Pilot

- No memorandum to share data
- No common access model
- Dealing with multiple application administrators
- Multiple user IDs/password/expiry dates
- Require knowledge of multiple systems/training/support
- No way of identifying what information is available in source system
- Unstable technology





Next Steps

- Where do we go from here???





Questions





Contact Information

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