

HeartChart integrated user interface for patient data and records

HeartChart is a patient-centric medical records application that integrates patient demographic and clinical information from a database application with medical record documents from the Hummingbird DM patient records management system in a practitioner-friendly, medical chart-like user interface.

HeartChart provides doctors and clinical staff with a view that is organized according to their accustomed way of working – from the patient's physical chart.

HeartChart is also integrated with an Adobe electronic forms application, allowing clinical staff to create new electronic progress notes for a patient from the same interface.

HeartChart - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Search Patient Data All Records Selected Records

Progress Notes H&P/Consults Discharge Meds/Req. Slips Arrhythmia/Device

Labs CV Lab Echo GXT ECG/Holter Rad/Other Dx Research Ins./AD/Auth

Welcome to St. Paul HeartChart

Find Patient

Acct:

Last:

First:

DOB:

Date range search

Start:

End:

Search Clear

Help

No Patient Currently Selected

Recent patients

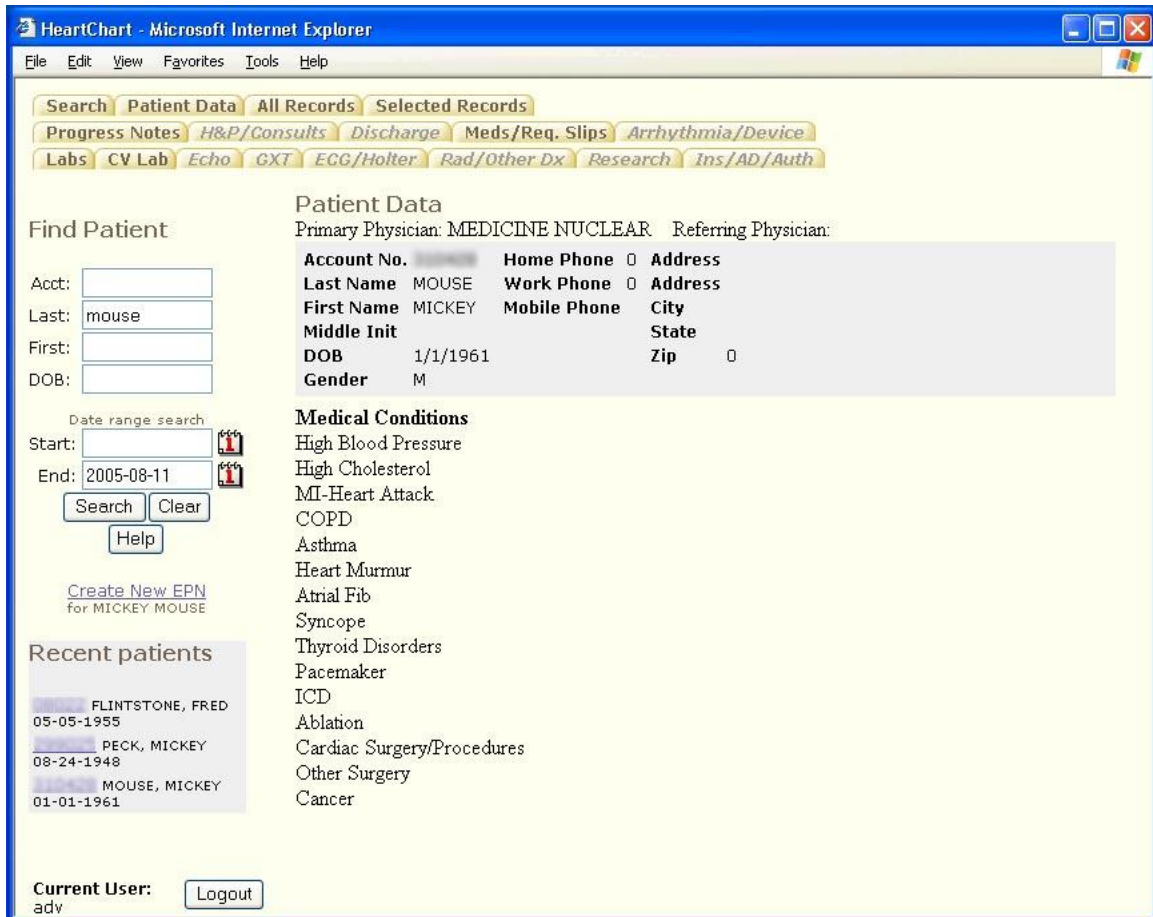
- FLINTSTONE, FRED
05-05-1955
- PECK, MICKEY
08-24-1948
- MOUSE, MICKEY
01-01-1961

Current User: Logout

1. Searching for patient information

The initial view allows searching for patients in the clinical database by a variety of criteria. A list of recently accessed patients is maintained for each user for quick reference.

Because HeartChart communicates with the DM system via the API, all security and activity logging functions are maintained, even though the standard DM clients are bypassed. The patient account number from the clinical database provides the link to documents in the DM system.



2. Patient data from clinical database.

Document types in the DM system are assigned to tabs in the HeartChart interface. Mapping of document types to tabs is configurable, so that new types can be accommodated easily without code changes. For user convenience, tabs that do not contain any documents are disabled.

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MOUSE, MICKEY
 Acct. No: [REDACTED]
 DOB: 1/1/1961
 Searched: All Dates

Check/Uncheck All
 03-11-2004 INR CAAMLIE

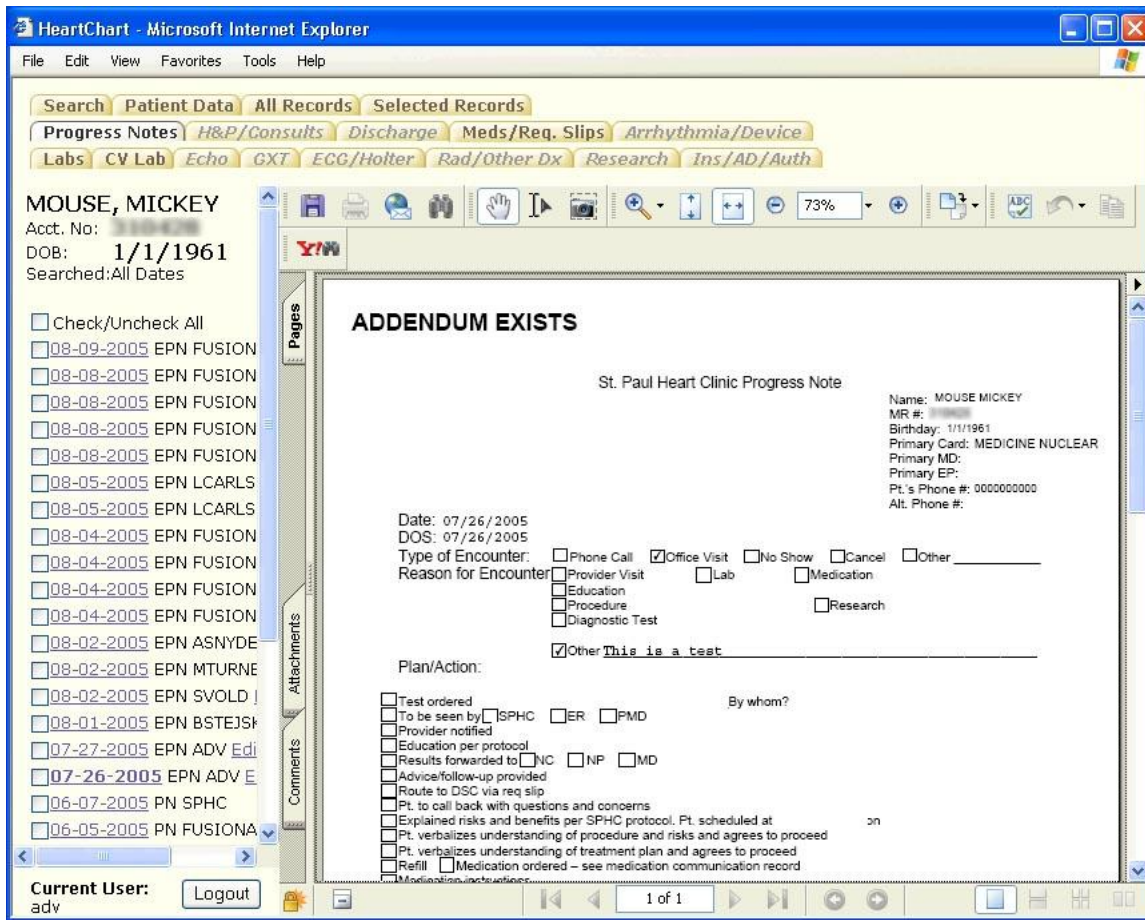
MickeyID	DOB	AddressLine1	HomePhone				
Last Name	AddressLine2	WorkPhone	MobilePhone				
First Name	City	State	Zip Code				
Middle Initial	State	Zip Code	Pharmacy				
DOB	Gender	Target	Target				
Admitte	Dx	PR	Tablet				
Dose	Sched	Loc	Education				
Provided	Notes	NextVisit					
2.5	3	3/5/99 Aflatus	5	65 7.5mg MWF	DT		
3/11/2004	2.2	65	7.5 mg MWF & 10	No changes		4/8/2004	
2/12/2004	1.9	62.5	10mg SuTuTh &	No changes Plan; return to previous dose of 10mg 4/7 & 7.5mg MWF w/ inr		3/1/2004	
1/12/2004	3.5	65	7.5mg MWF &	No changes Continue to take Celebrex. Has decided to lose wt. Plan; 10mg 5/7 & 7.5mg MWFSA w/ inr 4wks		2/9/2004	
12/18/2003	2.5	65	7.5 MG MWF & 10	MISSED DOSE 12/14. No other changes. Plan; same coumadin and inr 4wks unless changes		1/15/2004	
11/20/2003	2.1	65	7.5mg MWF & 10	No changes. Plan; no grams for 3 day; same coumadin and inr 4wks		12/18/2003	
10/22/2003	2.4	65	7.5 mg MWF & 10	No changes since last INR. Plan; same coumadin and INR 4wks		11/21/2003	
9/24/2003	2.9	65	10 mg 5/7 & 7.5 mg	Came in because cut self while shaving and it took 20 min to stop. Anxious about INR being 2.9. Plan; Warfarin 7.5mg MWF & 10mg 4/7. INR 2wks		10/24/2003	
9/11/2003	2	62.5	10mg 4/7 & 7.5mg	Missed a dose sometime last week. On low end twice now so will increase to 10mg 5/7 & 7.5mg Su, W, INR 4wks		10/1/2003	

Current User: adv Logout

1 of 1

3. Record displayed in viewer window.

When a tab is selected, all documents of the corresponding type(s) are listed in the left frame, sorted by date of service. Clicking a link displays the document (in PDF form) in the right frame. In any tab, documents can be selected via a checkbox for inclusion in an assembled PDF chart document.



4. E-form progress notes list with selected documents.

The electronic forms integration speeds entry of patient progress notes and reduces error by copying needed information from the clinical database to the form.

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Progress Notes H&P/Consults Discharge Meds/Req. Slips Arrhythmia/Device

Labs CV Lab Echo CXT ECG/Holter Rad/Other Dx Research Ins/AD/Auth

MOUSE, MICKEY
 Acct. No: [REDACTED]
 DOB: 1/1/1961
 Searched: All Dates

Print | Email | Copy

Selected Records

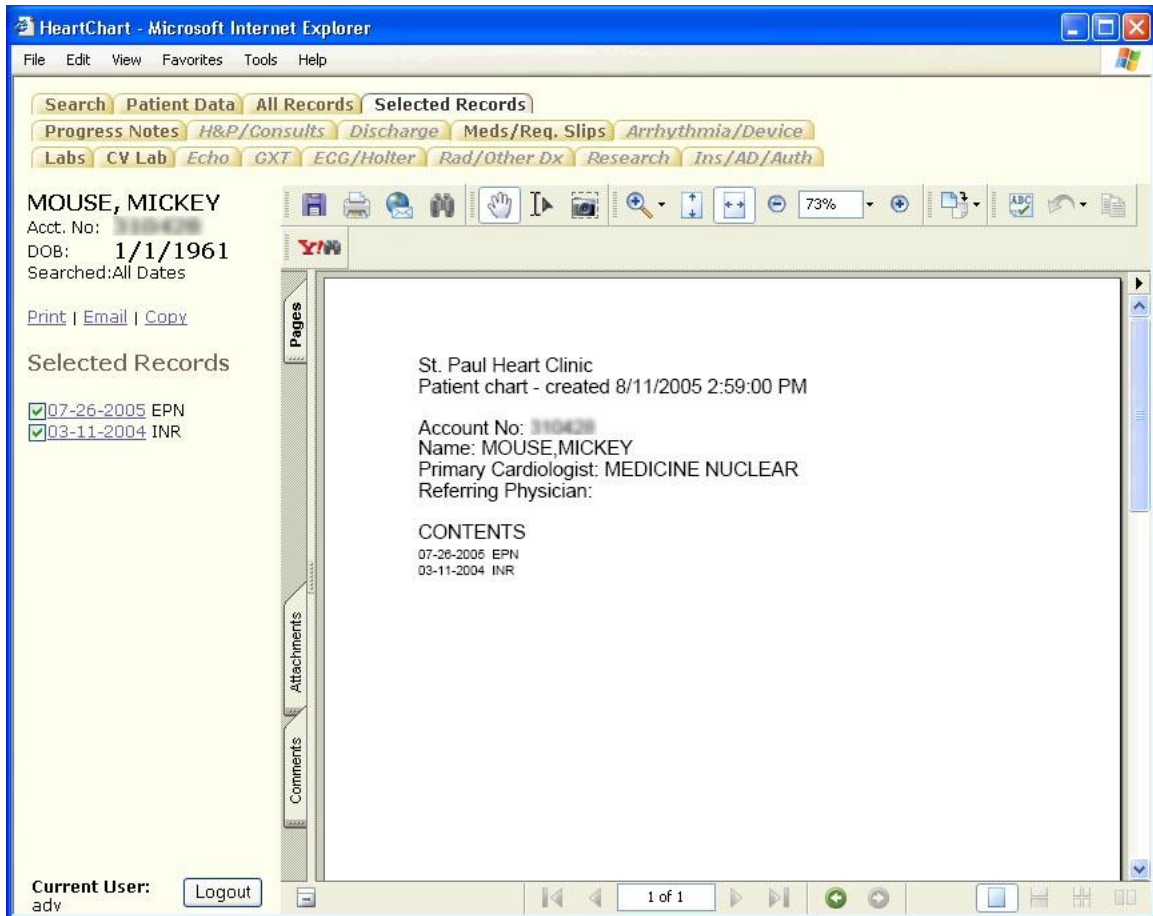
07-26-2005 EPN
 03-11-2004 INR

MiscID	Issue	AddressLine1	HomePhone		
LastName	AddressLine2	WorkPhone	MobilePhone		
FirstName	City	State	ZipCode		
MiddleInitial	State	Pharmacy			
DOB	Gender				
	M				
Target	Target	Admitte			
Low	High				
2.5	3	3/5/99 Admitt			
VisitDate	INR	Dose	Schedule	Notes	NextVisit
3/11/2004	2.2	65	7.5 mg MWF & 10	No changes	4/8/2004
2/12/2004	1.9	62.5	10mg 2xTuTh &	No changes Plan; return to previous dose of 10mg 4/7 & 7.5mg MWF w inr	3/11/2004
1/12/2004	3.5	65	7.5mg MWF &	No changes Continue to take Celebrex. Has decided to lose wt. Plan; 10mg 5/7 & 7.5mg MWFSA w inr 4wks	2/9/2004
12/18/2003	2.5	65	7.5 MG MWF & 10	MISSED DOSE 12/14 No other changes. Plan; same coumadin and inr 4wks unless changes	1/15/2004
11/20/2003	2.1	65	7.5mg MWF & 10	No changes. Plan; no green for 3 day; same coumadin and inr 4wks	12/18/2003
10/22/2003	2.4	65	7.5 mg MWF & 10	No changes since last INR. Plan; same coumadin and INR 4wks	11/21/2003
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9/11/2003	2	62.5	10mg 4/7 & 7.5mg	Missed a dose sometime last week. Cu low end twice now so will increase to 10mg 5/7 & 7.5mg 2xW. INR 4wks	10/11/2003

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5. The Selected Records tab shows checked records that can be combined into a customized chart for printing, e-mailing, or copying to a tablet PC.

Selected records can be assembled into a customized chart with just the required information. A contents page and bookmarks in the merged PDF document are created automatically.



6. The assembled chart has now been created and unlocked for printing, e-mailing or copying.

PDF's are used extensively to ensure a high degree of security, including print control and logging.

Technologies used within this application include: Hummingbird DM, Kofax Ascent, Adobe Acrobat, various web development technologies, Microsoft SQL Server, the patient demographics database, and 3rd party controls for PDF rendering and construction.