

# Clinical Decision Support

Tools for the Clinician at Atrius Health

# A Brief History

---

- Atrius Health is a parent not-for-profit corporation composed of 5 ambulatory multi-specialty groups-est. in 2004
- Harvard Vanguard Medical Associates
- Dedham Medical Associates
- Southboro Medical Groups
- South Shore Medical Center
- Granite Medical Group



Chelmsford

Southboro

● Harvard Vanguard Offices  
● Other Atrius Groups

Norwell

# A Brief History

---

- The groups have been providing services for a long time-DMA over 70 yrs
- HVMA was originally a Staff-Model HMO-closed system, fully capitated
- The other groups were a combination of risk and Fee for Service, private and government
- In 1990's all groups in approximately the same mix of insurance products

# Atrius Health

---

- Let's do the numbers . . .
  - 700,000 patients
  - 800 physicians, 1,250 other healthcare professionals
  - 35 specialties
  - over 30 locations

# Atrius Health

---

- HVMA on Epic Ambulatory since 1999
- Other groups since 2006
- Single Instance allows for shared data
- Single Data Warehouse

# Information at Point of Care

[Print](#) [Pt Lists](#) [Appts](#) [Msg](#) [UpToDate](#) [Pregnancy Wheel](#)

Names	Pt Type	PCP	Alerts	LOC	MyChart
<b>Dr. Strawbri*</b>	<b>HPHC-FI</b>	<b>MYCHART, MD</b>	<b>HM</b>	<b>MEDFORD</b>	<b>Off</b>

[Open Orders](#) [Print AVS](#) [Media Manager](#) [Update Reg Info](#)

Condition	Severity	Type	Noted	Valid Until
			5/20/2010	
	<b>High</b>	<b>Intolerance</b>	<b>6/7/2010</b>	

by Kristen H. Gunning, MD on 1/3/2011 at 11:51 AM

Tobacco	
Smoking Status:	Current Everyday Smoker (Quit: 7/6/...

# Information at Point of Care

---

- 120,000 CME hours accumulated in 1<sup>st</sup> yr
- 20,000 “redeemed” for certificates
- 500,000 topic hits
- 1/3 medication related

# Best Practice Advisories

---

- Build tool
- How intrusive should the alert be?
- Focus on the Workflow
- Attention to results
- Keep it or Kill it?
- Over-Alerting-med and allergy databases

# Navigator Section Overview

The screenshot displays a medical software interface for a patient visit on 12/6/2010. The main content area shows a Best Practice Advisory (BPA) titled "Please review patient's BMI. Open the SmartSet to access orders and documentation tools. 6.88% of growth percentile based on BMI-for-age." The BPA includes an "Acknowledge Reason:" field, a "See Comments" button, and a checkbox for "Open SmartSet: Select SmartSet to access Obesity related Orders, Documentation, and Patient Instructions." Below this is a link to "AGL: Kids Health Guide to Obesity".

Annotations with red arrows point to various elements:

- Brief Description of BPA**: Points to the main advisory text.
- Quick Button**: Points to the "See Comments" button.
- Quick Link to outside resources**: Points to the "AGL: Kids Health Guide to Obesity" link.
- Acknowledge Reasons can be selected to document why a certain action was taken.**: Points to the "Acknowledge Reason:" field.
- SmartSet/Order Selection can be used to Open a SmartSet that contains predetermined Orders, Medications, DX's, or Patient Instructions**: Points to the checkbox and its description.

The left sidebar shows a "CHARTING" menu with "BestPractice" selected. The top navigation bar includes icons for Images, Questionnaires, Admin, Benefits Inquiry, Scans, Open Orders, Care Teams, Print AYS, and Media Manager.

# SmartSet View

12/6/2010 visit with Alan Brush, MD for Office Visit

Images Questionnaires Admin Benefits Inquiry Scans Open Orders Care Teams Print AVS Media Manager

CHARTING  
Chief Complaint  
Allergies  
Vitals  
History  
Med. Document  
**BestPractice**  
Nursing Notes  
Progress Notes  
**SmartSets**  
Annotated Images  
Dx and Orders  
Pt. Instructions  
LOS  
Follow-up  
Close Encounter

**SmartSets**

Search

Select SmartSet to access Obesity related Orders, Documentation, and Patient Instructions.

You can set your favorites by right-clicking on a SmartSet.

**Opened SmartSets**

**Select SmartSet to access Obesity related Orders, Documentation, and Patient Instructions.**  
*From BestPractice:* Please review patient's BMI. Open the SmartSet to access orders and documentation tools.  
6.88% of growth percentile based on BMI-for-age.

SmartSet Built for the request of a BPA for Obesity

**Obesity Resources**

**Charting**  
 Blank Note (1735)

**Orders**

**Diagnosis**

**Level of Service**  
**Office Visits**  
 EST PAT L3 Office Visit [99213]

**Patient Instructions**  
 Healthwise Obesity Patient Instructions

**Follow Up**  
 FOLLOW UP MODULE [Right Click to Complete]

Carries forward BPA description

Additional location for accessing external resources [Optional]

SmartSet Content is customizable to include recommended Orders, LOS, PI, or Diagnoses. Items are selected via checkboxes within the appropriately grouped sections.

1 of 6 selected

# Standardization?

---

- Can we build structure around Clinical Decision Support?
- Will it help with adding/removing support over time?
- What are data limitations?
- Sharing outside of practice?
- Outside of emr?

# Data for Population Management

MM-PCP-LEE MD, MICHAEL A 15741 (5 Patients)

as of 1645



ID (both)	Patient Name	Home Phone	Last HBA1C	HBA1C	Neph Scrn	Last Eye Exam	Last LDL (calc)	LDL (calc)	Last LDL (dir)	LDL (dir)	Last BP	Systolic	Diastolic	TYPE	PCP	Primary Site
[REDACTED]	[REDACTED]	[REDACTED]									2010-03-1	094	076	Self-Pay	Lee,	NORW
														Self-Pay	Michael,	
														Self-Pay	MD	
														Self-Pay		
														Self-Pay		
3 [REDACTED]	[REDACTED]	[REDACTED]			2008-12-2						2010-10-2	104	061	Self-Pay	Lee,	NORW
														Blue	Michael,	
														Shield	MD	
														Self-Pay		

# What's Coming Next?

---

- Adding support for high-cost/high-technology imaging
- Integrating clinical knowledge tools more closely into patient problems
- Stronger move to team-based management