Hello. We are Studio TACK.

We are a team of designers, architects, writers, teachers, and annoyingly curious people. Studio TACK is based in Brooklyn, NY and is led by Ruben Caldwell, Leigh Salem, and William Brian Smith.

Click here for more about us and what we do.
Our Approach:

Don’t give patients an archive.

Give them a strategy.
Among many factors, hospitals measure the efficacy of patient care through “bounce back” rates, the number of patients who return to the hospital after they are discharged. “Bounce backs” are a common source of disappointment for physicians because they signal a glitch in the care management process. Inevitably, the most difficult cases return; however, almost 75% of readmissions are preventable¹. In a hospital, where a patient has unlimited access to care and information, it’s easy to lose sight of the patient’s needs once they are home and responsible for their own care. “Bounce backs” return because they lost track of medications, ignored consequential symptoms, or lacked guidelines for self-care.

One critical factor at preempting patients’ returns is the organization of patient medical records and care instructions. Medical records must exceed their denotations and become strategies for total patient care. We must stop approaching medical records as transcripts and see them as tools for patient participation in their care.

Currently, the Veterans Hospital organizes medical records chronologically. When doctors scan a patient’s medical history they cross-reference multiple and disparate forms of data simultaneously. They synthesize trends, anomalies, and developments – a process absent from any medical form. What they end up with is a mental image of the patient grouped by problem. In fact, there’s been a big push in hospitals to organize physician notes by problem, not chronology. To know what is being done by each problem gives care teams a better plan of action. Our design appropriates this skill of synthesis and recombination to provide a more meaningful strategy of care for the patient.
Our Goals

1. Medical Record Strategy.
   - Ensure total patient care by coordinating and sharing accountability among multiple departments and providers.

2. Prevent “bounce backs” by providing evidence-based clinical guidelines within medical record strategies.

3. Promote and broaden patient participation by providing multiple and convenient outlets for patient access to medical record strategies.

4. Increase patient independence with clear, well-organized, and beautiful medical record strategies.
Our Patient

One of the greatest challenges our health care system will face will be the “Senior Boom”. Americans aged 85 years and older are the fastest growing segment U.S. population. By 2020 the average life expectancy will be 82 years for women and 74 years for men (in 1996 it was 75). A growing aging population with increased health needs places significant strain on our health care system. By the year 2030 caring for older patients will represent fifty percent of health care costs. In this light, we’ve chosen a patient who epitomizes these changes and whose profile demonstrates the increasing patient complexity hospitals face. Our patient is a 70-year old Vietnam and Gulf War veteran living in Gainesville, FL where he is a patient at the Malcolm Randall Veterans Hospital, a tertiary care and teaching facility. We formulated this profile in anticipation of our country’s growing health care challenges.

Patient: Caldwell, Ruben
Address: 240a SW 3rd St.
Gainesville, FL 32601
Date of Birth: June 20, 1939
Phone: 352-223-2091

Patient

<table>
<thead>
<tr>
<th>First Name</th>
<th>Ruben</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Name</td>
<td>Caldwell</td>
</tr>
<tr>
<td>Gender</td>
<td>M</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Single</td>
</tr>
<tr>
<td>Religious Affil.:</td>
<td>NA</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>White/Caucasian</td>
</tr>
<tr>
<td>Language</td>
<td>English</td>
</tr>
</tbody>
</table>
| Address      | 240a SW 3rd St.  
              | Gainesville, FL 32601 |
| Telephone    | 352-223-2091 |
| Date of Birth| June 20, 1939 |

Care Provider

<table>
<thead>
<tr>
<th>Primary Care:</th>
<th>Bishop, J. ANRP</th>
</tr>
</thead>
</table>
| Address:      | Malcolm Randall VA  
                | Medical Center  
                | Gainesville, FL |
| Phone:        | 1-888-500-5678  |

Immunizations

- Pneumovax
  07/09/2002

- Hepatitis B Series completed
  01/12/2005

- Tetanus Toxoid
  02/02/2010

Allergies

- Latex
  (AV/Historical) with rash and agitation.
Hi Ruben.

Patient Profile

First Name: Ruben
Last Name: Caldwell
Gender: M
Marital Status: Single
Religious Affil.: NA
Ethnicity: White/Caucasian
Language: English
Address: 240a SW 3rd St.
          Gainesville, FL 32601
Telephone: 352-223-2091
Date of Birth: June 20, 1939
Problem/History

Our health history is non-linear. Illnesses appear and disappear and then appear again, against all logic and professional judgment. Complications arise and persist not by sequence but through a convoluted matrix of biological and medical incongruencies. A medical history organized solely by chronology does little to help a patient understand where they are and where they need to be. We imagine a medical history that goes beyond a passive transcript – one that recalls and establishes strategies of care with demonstrable tactics. A medical history organized by problems and actions gives patients a fresh perspective on the scope and breadth of their medical care. Here, the two-column layout allows a patient to see their health history like their doctor, a narrative of strategies taken to resolve medical concerns. On the right side, patients have access to the names of everyone coordinated in their recovery. The “initial presentation” clues them into how far they’ve come since diagnoses. Our “what to watch for” section provides a field where anyone on the care team can collaborate and suggest interim guidance. On the left side, we’ve culled problem-specific actions and histories, which gives the patient a thorough breakdown of procedures performed, medications prescribed, and tests taken.
Medical History

Problem

Gout

Involved in Care
James Bishop, ANRP
Matthew Leonard, MD
Stephanie Wrenn, RD

Primary Care
Diagnosing Physician
Dietitian

Initial Presentation
Acute right knee pain and tenderness around joint line - this was likely caused by acute renal failure.

What to watch for
If you have worsening knee pain, see your primary care doctor or urgent care physician. They may want to start long-term therapy with allopurinol, a gout medication.

History

Nov. 16, 2012 - Present

Nov. 19, 2012
Medications: Colchicine, as needed for gout attacks.

Nov. 16, 2012
Procedures: The fluid in your right knee was drained.
Tests and Examinations: The fluid tested positive for gout crystals.
Medications: You were given a steroid injection to reduce inflammation and a short-course prednisone to reduce pain and inflammation.

Inguinal Hernia

Involved in Care
James Bishop, ANRP
Matthew Leonard, MD
Stephanie Wrenn, RD

Primary Care
Diagnosing Physician
Dietitian

Initial Presentation
Mr. Caldwell noted a non-tender lump in his scrotum.

What to watch for
Will monitor your hernia during physical exams at primary care appointments. Eat a high-fiber diet to avoid constipation, which can cause hernia-related pain.

Oct. 31, 2012 - Present

Oct. 31, 2012
Tests and Examinations: Mr. Bishop performed a hernia examination and identified a small benign inguinal hernia.

Congestive Heart Failure

Involved in Care
James Bishop, ANRP
Steven Wright, MD

Primary Care
Cardiologist

Initial Presentation
Mr. Caldwell was diagnosed with congestive heart failure on an echocardiogram after a heart attack in 2002. He has had multiple heart failure exacerbations with shortness of breath and leg edema. His most recent echo showed a LVEF (a measure of heart function) of 20-25%.

Jan. 1, 2002 - Present

Aug. 1, 2011
Procedures: Automatic implantable cardiac defibrillator.

July 1, 2011
Tests and Examinations: Routine echocardiogram showed LVEF 20-25%; worsening symptoms of fluid overload; stopped furosemide; started bumetanide.

May 5, 2009
Tests and Examinations: Routine echocardiogram showed LVEF 35-40%; started spironolactone and furosemide.
Medical History

Problem

Congestive Heart Failure

What to watch for

Weigh yourself daily and keep these values in a log that you bring to appointments. Limit sodium intake to < 2 g per day, and limit your fluid intake to 2L or less. If you have worsening shortness of breath or leg swelling, call your doctor.

History

Jan. 1, 2002 - Present

Jan. 1, 2002

Tests and Examinations: Echocardiogram after recent heart attack showed left ventricular ejection fraction (LVEF) 45-50% (normal is > 55%); started Lisinopril, Aspirin, Metoprolol, and Simvastatin.

Coronary Artery Disease

Involved in Care

James Bishop, ANRP
Steven Wright, MD

Primary Care
Cardiologist

Initial Presentation

A screening lipid panel showed high LDL cholesterol and low HDL cholesterol.

What to watch for

Please continue a healthy diet low in cholesterol, and continue the exercise plan we designed. If you have chest pain or shortness of breath, please seek medical attention. Continue to take your Simvastatin, Aspirin and Clopidogrel as prescribed.

Jan. 29, 2001 - Present

Oct. 10, 2012

Tests and Examinations: Routine lipid panel showed HDL (66) and LDL (68) cholesterol were well controlled at goal levels (HDL >60, LDL <70).

June 6, 2006

Tests and Examinations: Reported to VA emergency room with chest pain and elevated cardiac enzymes. Left heart-catheterization was performed and placed drug-eluting stents in 2 vessels; bypass grafts were open.

Feb. 2, 2003

Procedures: Double coronary artery bypass grafting was performed using saphenous and LIMA grafts.

March 30, 2005

Tests and Examinations: Reported to the emergency department of outside hospital with chest pain and was found to have severe blockages in 2 major coronary arteries.

Jan. 29, 2002

Procedures: Double coronary artery bypass grafting was performed using saphenous and LIMA grafts.

Glaucoma

Involved in Care

James Bishop, ANRP
Brendon Browne, MD
Deborah DeBoard, MD

Primary Care
Diagnosing Physician
Ophthalmologist

Initial Presentation

Mr. Caldwell reported pain in eyes. Increased intraocular pressure was noted on screening ophthalmology exam.

What to watch for

Continue with medication, if symptoms worsen contact your primary care physician. Schedule follow-up appointments yearly with your ophthalmologist.

March 30, 2005 - Present

March 30, 2005

Tests and Examinations: Referral to Ophthalmologist for examination.

Medications: Started Latanoprost eye drops; continuing yearly follow-up appointments with ophthalmology
**Medical History**

**Problem**

**Diabetes Mellitus, Type II**

**Involved in Care**
- James Bishop, ANRP
- Deborah Smith, MD
- Stephanie Wrenn, RD

**Primary Care**
- Diagnosing Physician
- Dietitian

**Initial Presentation**
Hyperglycemia (blood glucose >126) was recorded on 2 consecutive tests of fasting blood glucose.

**What to watch for**
It is very important to take your long-acting and short-acting insulin as prescribed. Please record your blood sugar at least 3 times per day (before breakfast, before lunch, and after dinner) and record this in your logbook. If you notice blood sugars greater than 400 on several consecutive tests, please call your doctor. If your blood sugar is less than 70, please only take a half-dose of regular insulin before your next meal.

**History**

*Jan. 19, 2005 - Present*

**Sep. 9, 2011**
Tests and Examinations: Hemoglobin A1C 7.9% (This test is related to your average blood sugars for the last 3 months. The goal is less than 7%).

**Feb. 12, 2011**
Medications: Stopped oral therapy for diabetes. Started insulin-glargine and pre-meal insulin.

**April 5, 2009**
Medications: Started Glipizide. Continue Metformin.

**Jan. 19, 2005**
Medications: Started Metformin.

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**Insomnia**

**Involved in Care**
- James Bishop, ANRP
- Alfredo Sklar, MD

**Primary Care**
- Diagnosing Physician

**Initiaal Presentation**
Mr. Caldwell reported difficulty falling asleep and staying asleep over the course of several months.

**What to watch for**
If you continue to have difficulty falling asleep and staying asleep, or if you find you are using zolpidem more than 4 times per week, please call your doctor.

**June 30, 2002 - Present**

**Sep. 9, 2011**
Medications: Zolpidem 5 mg at bedtime as needed for insomnia

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**Hypertension**

**Involved in Care**
- James Bishop, ANRP

**Primary Care**

**Initial Presentation**
High blood pressures were recorded at 2 consecutive clinic appointments; confirmed with readings taken at home.

**What to watch for**
Please check your blood pressure at home from time to time, and record these values in your logbook.

**1960 - Present**

**Sep. 9, 2011**
Medications: Started Amlodipine; continue Losartan; continue Hydrochlorothiazide.

**April 18, 2002**
Medications: Stopped Lisinopril due to adverse drug reaction (cough); started Losartan; continue Hydrochlorothiazide.

**Feb. 17, 2002**
# Medical History

## Problem

### Hypertension

<table>
<thead>
<tr>
<th>1960 - Present</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medications:</strong> Started Lisinopril for congestive heart failure. Continue Hydrochlorothiazide.</td>
</tr>
<tr>
<td><strong>Aug. 4, 1998</strong></td>
</tr>
<tr>
<td><strong>Medications:</strong> Started Hydrochlorothiazide.</td>
</tr>
</tbody>
</table>

### Regular Health Screenings

<table>
<thead>
<tr>
<th>1998 - Present</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feb. 10, 2010</strong></td>
</tr>
<tr>
<td><strong>Medications:</strong> Tetanus Toxoid</td>
</tr>
<tr>
<td><strong>Aug. 2, 2008</strong></td>
</tr>
<tr>
<td><strong>Procedures:</strong> Colonoscopy, normal.</td>
</tr>
<tr>
<td><strong>Nov. 15, 2004</strong></td>
</tr>
<tr>
<td><strong>Medications:</strong> Pneumomax</td>
</tr>
<tr>
<td><strong>Jan. 19, 2004</strong></td>
</tr>
<tr>
<td><strong>Medications:</strong> Hepatitis B Series completed.</td>
</tr>
<tr>
<td><strong>July 23, 1998</strong></td>
</tr>
<tr>
<td><strong>Procedures:</strong> Colonoscopy, normal. Removed two non-cancerous polyps.</td>
</tr>
</tbody>
</table>

### Major Depressive Disorder

<table>
<thead>
<tr>
<th>Feb. 3, 2003 - June 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>June 2007</strong></td>
</tr>
<tr>
<td>**Medications:**Stopped medication.</td>
</tr>
<tr>
<td><strong>Feb. 11, 2003</strong></td>
</tr>
<tr>
<td><strong>Medications:</strong> Started Fluoxetine 10 mg qdaily</td>
</tr>
<tr>
<td><strong>Feb. 4, 2003</strong></td>
</tr>
<tr>
<td><strong>Tests and Examinations:</strong> Initial visit with psychology for talk therapy.</td>
</tr>
</tbody>
</table>

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### Involved in Care

- **James Bishop, ANRP**
- **Primary Care**

### Initial Presentation

Mr. Caldwell reported poor mood related to his diagnosis of congestive heart failure and the associated limitations it places on his activities of daily living.

### What to watch for

If you feel your symptoms are worsening, or if you find yourself feeling helpless or suicidal, please call your doctor or the VA Suicide Hotline (1-800-273-8255).
Following our two-column organization, the patient history is divided between problem and history. The key to this strategy is grouping the histories by problem and accompanying them with their complete history, rather than simply displaying history solely on chronology. This benefits the patient and doctor as it allows them to fully grasp the approach taken to each specific problem.

Every problem history lists a comprehensive history, by date, and includes medications given, procedures performed or schedules, and tests and examinations completed.

The patient history includes a list of all doctors and care providers associated with each problem (from diagnosis to referral). The initial presentation is listed and is followed with additional advice (from anyone on the patient's care team) for care and follow up.
While histories are helpful to understand the range of care provided, they can become overwhelming as complications persist and complexity increases. To remedy this, we’ve created a “snapshot” cover page to accompany the more detailed medical history. The “snapshot” is an annotated abridgment to the patient’s active problems. It presents color-coded problem summaries that include up-to-date lab tests and medications. We imagine this is something they’ll keep on the fridge alongside their medicine schedule.
Patient: Caldwell, Ruben  
Address: 240a SW 3rd St. 
Gainesville, FL 32601  
Date of Birth: June 20, 1939  
Phone: 352-223-2091  
Primary Care: Bishop, J. ANRP  
Address: Malcolm Randall VA Medical Center Gainesville, FL  
Phone: 1-888-500-5678

Body Map

Problem

01 Glaucoma
Medications: Latanoprost  
Updates: Glaucoma damages the optic nerve through increased pressure in the eye. The goal of treatment is to reduce eye pressure.

02 Insomnia
Medications: Zolpidem  
Updates: If you continue to have difficulty falling asleep and staying asleep, or if you find you are using zolpidem more than 4 times per week, please call your doctor.

03 Diabetes Mellitus, Type II
Medications: Insulin Gargin  
Updates: Your most recent A1C test: 7.9% (Your goal is 7%).

Please record your blood sugar at least 3 times per day (before breakfast, before lunch, and after dinner) and record this in your logbook.

If you notice blood sugars greater than 400 on several consecutive tests, please call your doctor. If your blood sugar is less than 70, take only a half-dose of regular insulin before your next meal.

04 Cardiovascular
Medications: Rosuvastatin CA, Metoprolol Succinate, Isosoride Mononitrate, Bumetanide, Aspirin  
Updates: You have congestive heart failure. It is caused by damage to your heart muscle, which makes it harder to pump. The most common causes are high blood pressure and coronary artery disease. You have coronary artery disease.

Your latest lipid screening shows consistent improvement:

05 Colon
Updates: Your most recent colonoscopy was on August 25, 2008. Results: normal; removed 2 non-cancerous polyps. Your next colonoscopy is on August 25, 2014

06 Gout
Medications: Colchicine  
Updates: At your most recent visit, fluid in your knee tested positive for Gout crystals. If you have worsening knee pain, see your primary care doctor or urgent care physician. They may want to start long-term therapy with Allopurinol, a gout medication.
The patient “Snapshot” page culls all active and pressing medical problems from the patient history and lists them along with current medications (which also note changes in dosage or scheduling) and updates from a patient’s recent lab tests or physical examinations.

**Problem**

**Glaucoma**
- Medications: Latanoprost
- Updates: Glaucoma due to increased pressure in eye pressure

The patient “Snapshot” provides a clearly illustrated diagram to active problems. Only parts of the body that contribute to a patient’s problem list are included. This reduces confusion and helps the patient focus on his or her most pressing medical issues.
Hi Ruben.

Patient Summary & History

By Problem

By Date
Body Map

05 Colon

Updates: Your most recent colonoscopy was on August 25, 2008. Results: normal; removed 2 non-cancerous polyps. Your next colonoscopy is on August 25, 2014.

Medications Summary and Schedule
Gout

Inguinal Hernia

Congestive Heart Failure

January 1, 2002 - Present

Tests and Examinations:
Echocardiogram after recent heart attack showed left ventricular ejection fraction (LVEF) 45-50% (normal is > 55%); started Lisinopril, Aspirin, Metoprolol, and Simvastatin.

Weigh yourself daily and keep these values in a log that you bring to
Congestive Heart Failure

Tests and Examinations:
Echocardiogram after recent heart attack showed left ventricular ejection fraction (LVEF) 45-50% (normal is > 55%); started Lisinopril, Aspirin, Metoprolol, and Simvastatin.
Patients with complex medical histories need more than a list of prescriptions. Keeping track of multiple medications is not only daunting but also dangerous, which is why we’ve organized the medication form as both summary and schedule. Medications are grouped based by problem, giving the patient a more comprehensive understanding of their medical plan of action. Here, patients are informed of dosage, instruction (“what to do”), significance (what it does”), and special requirements. The summary is accompanied by a timeline that helps the patient grasp the sequence and caveats of their medicine schedule. Embedded within the design is a strategic redundancy that utilizes text, color, graphic and page structure to provide multiple interpretations of instruction.
# Meds

**Summary**

## Cardiovascular

- **Aspirin - 81mg tablet**
  - **What to do:** Take one (1) tablet by mouth everyday.
  - **What it does:** Reduces the risk of stroke and heart attack.

- **Bumetanide - 1mg tablet**
  - **What to do:** Take 1/2 tablet by mouth everyday.
  - **What it does:** Lowers blood pressure, helps protect heart muscle, lowers the risk of repeated heart attacks, slows the progression of congestive heart failure.

- **Metoprolol Succinate - 200mg tablet**
  - **What to do:** Take one (1) tablet by mouth twice everyday.
  - **What it does:** Diuretic ("water pill"), reduces fluid retention, lowers blood pressure.

## Diabetes

- **Insulin Gliargine - 100ml/unit**
  - **What to do:** Inject 30 units subcutaneously everyday.
  - **What it does:** Treats diabetes, provides 24-hour supply of insulin to help regulate blood sugar.

## Prostate

- **Tamsulosin HCL - 0.4mg capsule**
  - **What to do:** Take one capsule by mouth one time everyday.
  - **What it does:** Reduces prostate enlargement, treats urinary symptoms.

## Other

- **Pantoprazole NA - 40mg tablet**
  - **What to do:** Take one (1) 40 mg tablet every morning 1/2 hour before breakfast.
  - **What it does:** Prevents gastroesophageal reflux disease.

- **Zolpidem Tartrate - 5mg tablet**
  - **What to do:** Take one (1) tablet at bedtime as needed for insomnia. Do not take more than 4 times per week.
  - **What it does:** Makes it easier to fall asleep and stay asleep.

## Schedule

**Morning**

1. **Pantoprazole**
   - Take one (1) 40 mg tablet every morning 1/2 hour before breakfast.
   - Caution: Take on an empty stomach.

2. **Test Glucose**
   - Write this number down in your log.
   - Caution: If over 300 on two different days call your doctor.

3. **Bumetanide**
   - Take one (1) 1 mg tablet.

4. **Aspirin**
   - Take one (1) 81 mg tablet.

5. **Tamsulosin HCL**
   - Take one (1) 0.4 mg tablet.

6. **Metoprolol**
   - Take one-half (1/2) 200 mg tablet.

**Afternoon**

7. **Bumetanide**
   - Take one (1) 1 mg tablet.

**Evening**

8. **Insulin Gliargine**
   - Inject 30 units subcutaneously at bedtime.

9. **Zolpidem**
   - Take one (1) tablet at bedtime as needed for insomnia.
The medication page is divided into two columns: Summary and Schedule. The summary provides in-depth instruction and information about each prescription. The schedule reorganizes the prescription based on what time of day they should be taken.

Each dosage comes with dosage instructions and is accompanied by critical care icons and "caution" notes that communicate additional usage instructions or prohibitions.

The significance of the form is its ability to display medication details twice: once by problem group (Diabetes, Cardiovascular, Prostate, etc.) and again by a daily schedule. This alleviates confusion as patients adopt more complex medicine schedules.

The summary breaks down medications into convenient and understandable language “What to do” and “What it does”.

The color tint and numbered medicine profiles reinforce and encourage the maintenance of the patient’s schedule.
Hi Ruben.

Medications Summary and Schedule

December 1, 2012
This Week
This Month
Did you test your Glucose level this morning?
Central to our design concept is the representation of histories and trends, as these are the prevailing and most significant signs of change in health for a patient. Additionally, patient lab transcripts are perhaps the most daunting of medical records. Letters are next to numbers and numbers seem to go on forever. However, a great diagram demands great numbers, which means the lab summaries are the perfect place to demonstrate the power of turning data into meaningful information.
### Labs

#### Test

**Cholesterol**

**Hyperlipidemia**
A test for high cholesterol

**Test date:** 11/15/2012  
**Ordered by:** James Bishop, ANRP  
**Your Risk Group:** Very High

### Your Results

<table>
<thead>
<tr>
<th></th>
<th>Value (mg/dL)</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HDL</strong></td>
<td>61</td>
<td>≥200</td>
</tr>
<tr>
<td><strong>LDL</strong></td>
<td>78</td>
<td>&lt;100</td>
</tr>
<tr>
<td><strong>Total (w/w):</strong></td>
<td>174</td>
<td>&lt;200</td>
</tr>
</tbody>
</table>

**Goal:** 200 mg/dL  
Way to go! Keep up the good work.

### Next Steps

- Consistent regular exercise can lower triglycerides by 30% to 40% and boost HDL by 5 to 8 mg/dL. Exercise affects your cholesterol and triglycerides in two main ways:
  1. Exercise helps lower triglycerides, which at high levels are linked to coronary artery disease.
  2. Exercise also raises your levels of HDL, or the "good" cholesterol.

- Saturated fat is likely to raise blood cholesterol more than any other food in your diet. Reduce saturated fat to no more than 7% of total calories (16 grams/day for you), and cholesterol to no more than 200 milligrams per day.

### History

**Nov. 15, 2012**

**Total Cholesterol**
Your total blood cholesterol is a measure of LDL cholesterol, HDL cholesterol, and other lipid components

<table>
<thead>
<tr>
<th>Year</th>
<th>Value (mg/dL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>302</td>
</tr>
<tr>
<td>2009</td>
<td>291</td>
</tr>
<tr>
<td>2010</td>
<td>244</td>
</tr>
<tr>
<td>2011</td>
<td>211</td>
</tr>
<tr>
<td>2012</td>
<td>174</td>
</tr>
</tbody>
</table>

**HDL (good) cholesterol**
With HDL (good) cholesterol, higher levels are better. Low HDL cholesterol (less than 40 mg/dL) puts you at higher risk for heart disease.

<table>
<thead>
<tr>
<th>Year</th>
<th>Value (mg/dL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>41</td>
</tr>
<tr>
<td>2009</td>
<td>48</td>
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<tr>
<td>2010</td>
<td>52</td>
</tr>
<tr>
<td>2011</td>
<td>59</td>
</tr>
<tr>
<td>2012</td>
<td>61</td>
</tr>
</tbody>
</table>

**LDL (bad) cholesterol**
The lower your LDL cholesterol, the lower your risk of heart attack and stroke. Because LDL cholesterol is a major risk factor for heart disease, it's the main focus of your cholesterol-lowering treatment.

<table>
<thead>
<tr>
<th>Year</th>
<th>Value (mg/dL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>191</td>
</tr>
<tr>
<td>2009</td>
<td>183</td>
</tr>
<tr>
<td>2010</td>
<td>142</td>
</tr>
<tr>
<td>2011</td>
<td>112</td>
</tr>
<tr>
<td>2012</td>
<td>78</td>
</tr>
</tbody>
</table>
**Diabetes**

**Hemoglobin A1c**
A measure of glucose control over the 3 months

*Test date:* 07/23/2012  
*Ordered by:* James Bishop, A.N.R.P.

**Your Results**

**A1c** 7.4%

*Goal:* 7.0%  Almost there!

**Sticky Concept**
Sugar is sticky, and when it’s been sitting for a while, it’s harder to get off. Sugar sticks to your red blood cells, which last in the body for about 3 months. When we measure your A1c, we’re measuring the amount (%) of sugar stuck to these cells. The less sugar the test finds, the better.

**Fasting Blood Sugar**
Blood glucose measurement

*Test date:* 07/23/2012  
*Ordered by:* James Bishop, ANRP

**Your Results**

**A1c** 152 mg/dl

*Goal:* 70-130 mg/dl  Keep at it!

**Next Steps**
Research shows that both aerobic exercise and resistance training can help control diabetes, but the greatest benefit comes from a fitness program that includes both. Regular exercise helps you lose weight; it lowers your blood sugar; and boosts your sensitivity to insulin — which helps keep your blood sugar within a normal range.

Fiber should be an essential part of any diabetic’s diet. It reduces risk for diabetes complications by controlling your blood sugar. It also lowers complications for heart disease and promotes weight loss. Foods high in fiber include fruits, vegetables, beans, whole grains, nuts and seeds.

**History**

**July 23, 2012**

**A1C**
The higher the A1C level, the higher your risk of diabetes complications.

<table>
<thead>
<tr>
<th>Year</th>
<th>A1C</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>12.1</td>
</tr>
<tr>
<td>2009</td>
<td>10.2</td>
</tr>
<tr>
<td>2010</td>
<td>8.5</td>
</tr>
<tr>
<td>2011</td>
<td>8.4</td>
</tr>
<tr>
<td>2012</td>
<td>7.4</td>
</tr>
</tbody>
</table>

**Fasting Blood Sugar**
The higher your fasting blood sugar levels, the higher your risk for severe diabetes complications.

<table>
<thead>
<tr>
<th>Year</th>
<th>mg/dl</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>170</td>
</tr>
<tr>
<td>2009</td>
<td>155</td>
</tr>
<tr>
<td>2010</td>
<td>130</td>
</tr>
<tr>
<td>2011</td>
<td>144</td>
</tr>
<tr>
<td>2012</td>
<td>152</td>
</tr>
</tbody>
</table>
Tests results are grouped by problem, giving a patient a more comprehensive understanding of each test and its significance to their overall health.

The lab sheet is a great place to visualize difficult concepts through diagrams. Here where we help a patient conceptualize an important benchmark in diabetes maintenance.

Lab data is clearly demonstrated in easy-to-read histograms that show test history alongside a patient’s most recent results.

The lab sheets are an excellent place to pair results with productive instruction and tips on reducing risks and further complications.
Hi Ruben.

Patient Labs and Results

Cholesterol 11.15.12
Diabetes 07.23.12
Diabetes  July 23, 2012

Fasting Blood Sugar

Tests and Examinations:
The higher your fasting blood sugar levels, the higher your risk for severe diabetes complications.

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<td>2012</td>
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</tr>
</tbody>
</table>

100 140 180

2012: goal
Goodbye. Remember to wash your hands.

We referenced the following online research articles for helpful tips on cholesterol and diabetes control, which can be found in our patient lab report and summary sheets.

Shaw, Gina, “Exercise to Control Your Cholesterol,” WebMD, reviewed by Brunilda Nazario, M.D., webmd.com/cholesterol-management/features/exercises-to-control-your-cholesterol.
