The Evolution of Digital Medicine: Innovation at Cleveland Clinic

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Managing Director, eCleveland Clinic

Center for Adult Reconstruction and Joint Replacement
Program Director, Advanced Operative Technology Group, Orthopaedic Research Center
Orthopaedic and Rheumatology Institute
The Founders’ Vision

• “Better care of the sick, investigation into their problems, and further education of those who serve.”

• Develop a group that is "able to think and act as a unit."
A History of Innovation

Founded in 1921 by four renowned physicians

One of the world’s first physician-lead, non-profit group practices

Physicians cooperate on cases, consult and share information
The last time you needed cash, did you...

Wait in line at the bank?  
Stop at an ATM?  
Transfer funds online?
Transaction Costs

- **Wait in line at the bank?**
  - $1.07

- **Bank by phone?**
  - $0.54

- **Stop at an ATM?**
  - $0.27

- **Transfer online?**
  - $0.10
If you were diagnosed with diabetes, to get the information you need about your condition, would you...

- Use the card catalogue at the library?
- Google it?
And if you did use Google, what do you think you would find?

Use the card catalogue at the library?

Google it?
Moving the Practice of Medicine

• From a paper model

• To a digital model
Cleveland Clinic Update
Clinical Organization
Buildings
Locations
Critical Care Transport program
Cleveland Clinic

• Global leader in health care
  – History of innovation and new technology
  – #1 ranking in heart care 14th consecutive year
  – Significant clinical volumes in complex patient care cases

• Multispecialty, not for profit, integrated health system
  – Founded in 1921
  – Physician management

• Academic mission
  – Committed to patient care, research and education

• Multi-state operations and international
Cleveland Clinic

- **Group practice model**
  - 1,800 physicians and researchers
  - 120 specialties and sub-specialties
  - 34,000 employees

- **Main Campus**
  - 13 Family Health Centers in Ohio

- **Cleveland Clinic Health System**
  - 9 Community hospitals
  - 2 affiliate hospitals

- **Florida**
  - Weston Clinic and hospital

- **Canada**
  - Toronto Health and Wellness Centre

- **Cleveland Clinic Abu Dhabi**
  - Operational in 2012
  - Multi-specialty hospital and clinic

- **Patients visit from 50 states and more than 80 countries worldwide**
Cleveland Clinic Institute Model of Care

- Anesthesiology
- Arts and Medicine
- Cleveland Clinic Lorain
- Cole Eye
- Dermatology and Plastic Surgery
- Digestive Disease
- Education
- Emergency Services
- Endocrinology and Metabolism
- Glickman Urological & Kidney
- Head and Neck
- Heart and Vascular
- Imaging
- Lerner Research
- Medicine
- Neurological
- Nursing
- Obstetrics and Gynecology & Women's Health
- Orthopaedic & Rheumatologic
- Pathology and Laboratory Medicine
- Pediatric Institute and Children’s Hospital
- Professional Staff Affairs
- Quality and Patient Safety
- Regional Operations
- Rehabilitation
- Respiratory
- Surgery
- Taussig Cancer
- Wellness
Cleveland Clinic 1921
Sydell and Arnold Miller Family Pavilion

- Home of the Heart and Vascular Institute
- 128 exam rooms
- 79 procedure rooms
- 155 physician offices
- 278 single patient hospital rooms
- 110 intensive care beds
- 16 operating rooms
- Most advanced medical equipment
- Operating rooms are larger than average to accommodate teams of physicians treating complex cases
- Rooftop plaza with views of downtown Cleveland and Lake Erie
Heart and Vascular Institute

- Largest and most active heart, vascular and thoracic program in US
- Using the most sophisticated imaging, diagnostic and treatment technology available today
- More than 290,000 patients a year
- Physicians perform the most cardiac surgeries in the world
- One of the busiest transplant centers in the country

Cleveland Clinic has been ranked #1 in the nation for heart care every year since 1995
Cleveland Clinic Critical Care Transport
Cleveland Clinic’s Information Technology – Enabled Medical Practice Model
An enterprise-wide eHealth services program that is presently changing the paradigm of medical practice by applying Health IT solutions to improve patient care, enhance operational and administrative efficiency, reach out to patients and community physicians, and create new knowledge through ongoing research and education initiatives.
Cleveland Clinic
Integrated Health System
serving 5.1 million patients
Cleveland Clinic MyPractice™

Doctors

Nurses

Schedulers

Front Desk

Residents

Patients

Researchers
Integrated Electronic Medical Record

• Across the enterprise
  — Ambulatory records
  — In patient records
  — Integrated across all providers and all locations

• Outcomes data

• Benefits to
  — Patients
  — Providers
  — Payors
### Additional Details

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**On-Line Documentation**

Visit Navigator (10/16/2006 visit with PAPAY) - Editing: Progress Notes

**Allergies:** Reviewed on 5/10/2006: Ragweed, Pcn, Dust, Milk, Mold, Dander

**Vitals:** (Last filed) BP: P: T: T Svc: Resp: W: H:

**Progress Notes (F3 to enlarge)**

**Review Of Systems**

GENERAL: No weight loss, malaise or fevers.
HEENT: Negative for frequent or significant headaches, No
changes in hearing or vision, no nose bleeds or other nasal
problems.
NECK: Negative for lumps, goiter, pain and significant neck
swelling
RESPIRATORY: Negative for cough, wheezing and shortness of
breath
CARDIOVASCULAR: Negative for chest pain, leg swelling and
palpitations
GASTROINTESTINAL: Negative for abdominal discomfort, blood in
stools or black stools and change in bowel habits
GENITOURINARY: Negative for dysuria, frequency and incontinence
GYN: Negative for abnormal vaginal bleeding, abnormal vaginal

[Additional content from the screenshot is not transcribed here.]
Computerized Physician Order Entry
## Drug Interaction Alert

### Drugs:
- COUMADIN Tablet 2 mg PO
- ZOLOFT 50 mg PO

**Significance Level:** Very High

**Overrides and Accept:** Can override and accept the interaction.

**Type:** Drug-Drug

**Significance Description:** Severe Interaction

**Order(s):**
- COUMADIN 2 mg TAB
- ZOLOFT 50 mg TAB

**Override Reason/Comment:**
- Remove
- D/C

**Override Reason:**
- N/A
# Age, Gender, and Diagnosis Specific Health Maintenance Alerts

## Health Maintenance

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</table>

### Abbreviations for Override Types

- **Done**
- **Declined**
- **Postponed**
- **Not Done**

Use this activity to personalize the preventive care and disease management rules for this patient.
Government Mandate

- On April 27, 2004 the President signed an executive order establishing a new subcabinet-level position - the national health information technology (HIT) coordinator - and called for most Americans to have a computerized health record within 10 years
  - Fewer medical errors
  - Increased use of clinical guidelines and evidence based clinical decisions
  - Improved access to care and quality of care
  - Increased physician productivity
  - Improved coordination of care
  - Greater patient involvement in health
Recent Government Action

- February 17, 2009 President Obama signed the $787 billion American Recovery and Reinvestment Act of 2009 (ARRA)
- ARRA includes $140 billion for “comprehensive healthcare reform”
- $19.2 billion will be used to promote Health Information Technology adoption and implementation
- Physicians and hospitals are eligible to receive portions of these funds based on:
  - Having an integrated electronic medical record system in place by January 1, 2011
  - Demonstrating EMR “meaningful use” as defined by a National Coordinator for Health Information Technology committee that will begin its work in April, 2009
Today, the MyPractice electronic medical record system in place throughout the Cleveland Clinic Health System serves the needs of over 5.6 million patients.

Be at the forefront of today's electronic medical record (EMR) movement. Cleveland Clinic is a recognized leader in the use of integrated EMR systems, resulting in improved efficiency, lower costs and enhanced ability of physicians to deliver quality care to their patients.

Our comprehensive electronic medical record (EMR) infrastructure connects every caregiver in all of our facilities—which includes our main, downtown Cleveland campus, nine regional hospitals, a Florida hospital, and 13 northeast Ohio community Family Health Center locations—into what is essentially a single medical practice.
The eEnabled Medical Practice

Patients

Integrated System

Physicians

Support Services

Hospitals
Connectivity / Interoperability

MyPractice Community database pre-loaded with:
• 100+ million data elements

MyPractice Community connected to:
• Laboratories
  • Cleveland Clinic Health System
  • Quest Diagnostics
  • Lab Core

• Retail Pharmacies
  • Acme
  • CVS
  • Giant Eagle
  • RITE AID
  • Sam’s Club
  • Walgreens
  • Wal★Mart

• Transcription Companies
  • C-Bay
  • Premiere
  • Dragon Voice Recognition software
MyPractice Community
Integrated Electronic Medical Record System for Physicians in Private Practice

eCleveland Clinic MyPractice Community is an efficient and affordable electronic medical record system specifically developed for the busy private practice community physician.

MyPractice Community is an ambulatory product that allows the physician in private practice to conveniently access patient data inside a medical practice, at home and while in a hospital.
MyPractice Community Service Model

MyPractice
Integrated Electronic Medical Record System

Existing Physician Scheduling System
Existing Physician Registration System
Existing Physician Billing System

Schedule Interface
Printed Encounter Form

Dictated Note
“Outside” Lab

Retail Pharmacy

Cleveland Clinic
Cleveland Clinic

MyPractice Community
Total Users: 1135
Providers: 196
Residents / Fellows: 149
Midwives: 12
eHealth Services

Patients

- MyChart: Your Personal Health Connection
- Virtual Visit: Patient/Physician Interaction Globally
- MyConsult: Your First Choice for a Second Opinion
- MyMonitoring: Ongoing Condition Reporting from Home

Providers

- MyPractice: Electronic Medical Record System
- Dr. Connect: Improved Communication; Improved Care
- eResearch: Research Standardization: Real Data; Real Results
eHealth Market Demand

• Existing market for second opinions
  – Pervasive demand for second opinions
  – Measured impact of > $ billion
  – Opportunity to move it to the web

• Life altering diagnoses drive demand
  – To obtain expert advice and counsel
  – To access reliable health and medical information online
  – To eliminate the geographic boundaries to quality care
eClevelandClinic MyConsult®

• Remote access to second opinions
  – Remove geographic barriers to access for remote patients
  – Intake and output using secure web-based technology
  – Integration of data sources and output from disparate systems

• Second opinions only
  – Requires primary diagnosis data
  – Common second opinion diagnoses
  – Clinical expertise of Cleveland Clinic doctors
  – Opinion sent to patient’s physicians

• Application of technologies to second opinions
  – Combine separate processes into single seamless process
  – Seamlessly integrate into existing CCF operational processes
    – Clinical, scheduling, finance and operational systems
MyConsult Process

1. Browse website
2. Register
3. Login, securely
4. Request opinion
5. Complete clinical intake forms
6. Submit requested medical records
7. Radiology review
8. Pathology review
9. Triage complete
10. Schedule patient
11. Deliver materials to Physician
12. Complete opinion
13. Publish opinion
14. Assess Satisfaction
eCleveland Clinic is a Web-based extension of the Cleveland Clinic's role as one of America's most respected academic medical institutions. Proudly carrying on the tradition of the innovative application of technology for the benefit of all patients, eCleveland Clinic utilizes state-of-the-art digital information systems to eliminate geographic barriers and deliver a variety of quality e-health services, including:

- **MyConsult - Remote Second Opinion Consultations**: Through the secure eCleveland Clinic MyConsult website, patients around the world can request specialist second medical opinions for over 600 life-threatening/life-altering diagnoses. Second opinions are rendered by Cleveland Clinic physicians specializing in each diagnoses, are completed quickly, usually within five to seven working days, and are thorough and detailed, providing patients with the information they need to make informed decisions.
MyConsult Services

- Remote Medical Second Opinion
  Specialist consultations and second opinions for patients facing life-threatening and life-altering diagnoses.
  [Click Here for More Info]

- Pre-Adoption Consultation
  Online service to assist adoptive parents preparing to welcome a child into their lives.
  [Click Here for More Info]

- Remote Cardiology Film Second Opinion
  Expert imaging study analysis by Cleveland Clinic specialists
  [Click Here for More Info]

- Nutrition Consultation
  Look better, feel better, and take care of your heart and health with sound, personalized nutrition advice, any time, anywhere.
  [Click Here for More Info]
The International Adoption Program (IAP) of the Cleveland Clinic Pediatric Institute and Children's Hospital provides comprehensive care to internationally adopted children and their families, whether they live within or outside Northeast Ohio.

Services include:
- Pre- and post-adoption evaluations
- Ongoing primary care
- Multidisciplinary team evaluations
- Referrals to medical subspecialists, as needed

Pre-Adoption Consultations - eCleveland Clinic MyConsult
http://eclevelandclinic.org/adoption | 216.444.3223 800.223.2273 x 43223

Families connect with Dr. Schulte from the comfort and privacy of their home.
Full Pre-Adoption Consultations include:
- Review of the child's medical records, photos and videotapes
- Interpretation of medical terminology
- Assessing growth
- Outlining developmental and behavioral expectations
- A pre-travel consultation to help plan for medical, developmental, feeding, sleeping or other issues that may arise
- Phone consultation and support during the trip abroad

Other eCleveland Clinic Adoption Services:
- General medical information on international adoption
- Urgent reviews/blind referrals
- Basic, one-time records reviews

Post-Adoption Evaluations at Cleveland Clinic
International Adoption Program | 216.445.3033 or 800.CCF.CARE, ext. 53033

- A thorough physical examination, and a history review (to the extent available)
- Review of any new medical information
- Review of immunization status
- Assessment of infectious disease risks
- Assessment of developmental status
- Diagnostic tests or referrals to specialists, if needed

Other Available Services | 216.444.4367
- Ongoing primary care provided by Dr. Elaine Schulte
- Multidisciplinary team evaluations
- Referrals to pediatric medical specialists at Cleveland Clinic's Children's Hospital for care in all pediatric medical subspecialties

Employee Benefits Programs
eCleveland Clinic Business Development | 216.986.1228

Through the eCleveland Clinic Pre-Adoption Consultation, employees are offered a pre-adoption consultation to best prepare prospective parents to receive an adopted child into their home. Employers offer this program as an employee benefit to ensure that the prospective parents are best prepared to successfully deal with a newly adopted child's medical issues and cope with challenging transitional issues, such as feeding and sleeping.
What is a Pre-Adoption Consultation?

**MyConsult Pre-Adoption Consultation:**
is an online service to assist adoptive parents preparing to welcome a child into their lives.

eCleveland Clinic My**Consult** Pre-Adoption Consultations are conducted by Dr. Elaine Schulte, who is a board-certified pediatrician specializing in adoption medicine.
Available Pre-Adoption Services

1. **Pre-Adoption Consultation ($565)** - Preparatory consultation for parents with referral information or parents traveling overseas for a blind referral. Includes review of medical records, photos and videotapes on an ongoing basis for a single child. Includes access to sub specialists as needed, a one-hour pre-travel phone consult with Dr. Schulte and email access to Dr. Schulte while traveling.

   If you are requesting a Pre-Adoption consultation, it is possible to request an Additional Child Review for up to 3 other children (for a total of 4) for an additional fee of $125 per additional consult.

2. **Record Review ($285)** - One-time medical record review, which may include photos and/or videotapes. No ongoing access is provided.

3. **Blind Referral/Urgent Request ($565)** - Immediate, one-time consultation for families already overseas who need a medical opinion.

4. **General Adoption Information ($285)** - Personal phone consultation with Dr. Schulte to answer general medical questions regarding adoption.
Topics to review before starting

- What is a Remote Medical Second Opinion?
- How much does a Remote Medical Second Opinion cost?
- How do I request a Remote Medical Second Opinion?
- View Remote Medical Second Opinion Frequently Asked Questions

After Viewing the above topics

Click Here to Register

Additional Information

- View our top Conditions
- View a sample consultation
- View our staff of providers
- View Testimonials
- For more information on Google Health

Interested in offering this service as a benefit to your employees?

Click here

To browse the list of conditions and services...

Click Here

Email this page to a friend

Bookmark this page

Need Technical Help?
(Or if you have a Comment or Question about this page)

Click here
What is a Remote Medical Second Opinion?

For over 80 years, patients and families have looked to The Cleveland Clinic for medical advice and treatment. Now you may consult with our world-renowned physicians from the comfort of your home utilizing the customized second opinion service that is right for you:

- **Full remote second medical opinion**: Cleveland Clinic experts review your medical records and diagnostic tests and render an opinion that includes treatment options or alternatives and recommendations regarding future therapeutic considerations.

The Cleveland Clinic is one of the world’s largest and busiest healthcare institutions. With a Heart Center ranked best in the nation for thirteen consecutive years by U.S. News & World Report, The Cleveland Clinic is recognized as one of America’s four best hospitals, and has twelve specialty areas ranked in that magazine’s prestigious top 10. Our physicians are consistently recognized as national and international leaders in their fields.

When it comes to your health and well-being, confidently understanding your condition and options is a crucial first step in pursuing what is best for you.

If you would like more information on the e-Cleveland Clinic program, please contact us at 216.444.3223 or 800.223.2273 ext 43223; e-mail eClevelandClinic@ccf.org.
How much does a Remote Medical Second Opinion Cost?

The cost of an eCleveland Clinic MyConsult Remote Second Opinion is $565, payable in US funds at the time of the request. Your payment options include a major credit card (Mastercard, Visa, American Express, Discover), a certified bank check or a money order (from a U.S. bank payable in U.S. funds).

If a pathology review (reading) is required to complete your MyConsult Remote Second Opinion (as is the case in most cancer-related diagnoses), there will be an additional charge of $180 for that review for a total of $745 for the consult and reading.

Important Note: Your credit card will not be charged for the cost of the consult until the actual consultation report is provided to you by the specialist physician.

Is a Remote Second Opinion Covered by Insurance?

The eCleveland Clinic MyConsult Remote Second Opinion service is not covered by insurance programs.

Many employers have contracted with eCleveland Clinic to provide the MyConsult program as part of their employee benefit plan. If you are not sure if your company provides this coverage, call the eCleveland Clinic Help Desk at 216.444.3223 or 800.223.2273 ext 43223.

Unless your employer has a relationship with eCleveland Clinic as stated above, the cost of the consult is your financial responsibility.

eCleveland Clinic is unable to file a claim for remote second opinion services with any insurance company including Medicare. If you have any questions, please contact us at 216.738.5664.
Remote Medical Second Opinion Frequently Asked Questions

Before

- When should I consider an eCleveland Clinic MyConsult remote second opinion?
- Why should I get a MyConsult remote second opinion from The Cleveland Clinic?
- Is the eCleveland Clinic program available to anyone?
- What conditions are covered?
- Is the eCleveland Clinic MyConsult remote second opinion service available in every state?
- Can I request an eCleveland Clinic MyConsult remote second opinion for someone else?
- How much does an eCleveland Clinic MyConsult remote second opinion cost?
- Is an eCleveland Clinic MyConsult remote second opinion covered by my insurance?
- Will I receive a receipt for the MyConsult remote second opinion?
How do I request a Remote Medical Second Opinion?

To request a second opinion via the Internet from The Cleveland Clinic, you will first need to register to use the site. Once you have established a user name and password, you can access the e-Cleveland Clinic second opinion service from any computer with Internet access and a browser capable of 128-bit encryption (Internet Explorer 6.0 or higher). If this service is being provided by your employer, you may contact your human resources department for additional information or instruction.

Upon log in, you will be in a secure Web environment – any information you send can be read by only you and The Cleveland Clinic. (See our privacy policy for more information.)

There are seven steps in the request opinion process, which will take about 30-45 minutes to complete. It will be helpful to have a copy of the patient's medical records with you as you complete the medical history questions. You will be notified by e-mail when your opinion is ready and an e-Cleveland Clinic nurse will follow up by phone to ensure all of your questions are answered.

Each step of the Request Opinion process is outlined in more detail below:

**Step 1 — Requestor Information**
In this section we ask for basic registration information about you. This section takes about 5 minutes to complete.

**Step 2 — Patient Information**
In this section we ask for basic registration information about the patient. You may make a request on behalf of someone else if you have the patient's permission. The patient should complete a proxy form and it should be included in the package that you send to The Cleveland Clinic. This section takes about 5 minutes to complete.

**Step 3 — Diagnosis or Problem**
In this step, tell us the diagnosis the patient was given on his or her first opinion. If you aren't sure, type in a general term and then choose from the list given. This step takes 1-5 minutes to complete. We will let you know if we have a specialist available who can render an opinion about your condition.

**Step 4 — Payment Process**
Requesting a Standard Second Opinion

Our goal is to provide you with the most complete second opinion possible. The entire online process will take you 30-45 minutes to complete and it may be helpful to have a copy of your medical records as you complete Step 5: "Medical History." To request a second opinion from The Cleveland Clinic, a checklist of required items, such as physician notes, x-rays or lab tests, will be displayed in Step 6: "Checklists", immediately following Step 5: "Medical History." In some states, you will need your physician to complete a physician consent form. If this applies to you, you will be notified in Step 6: "Checklists" of the request opinion process. You may save any information completed online and come back to it at a later time. Once you have clicked "Approve" on Step 7: "Review and Final Approval", you may view the information submitted at any time. Should you have any questions or concerns regarding this process, you may contact us at 216.444.3223 or 800.223.2273 ext 43223.

In order for us to proceed with your request for a second opinion, you must agree to the terms and conditions listed below regarding the use of our secure second opinion process. Please review these terms and conditions and choose "I agree" at the end. If you decide that you do not agree with these terms and conditions, we will not be able to proceed with your request.

TERMS AND CONDITIONS OF USE
Welcome to The Cleveland Clinic’s Web site for patients seeking a MyConsult remote consultation, (including MyConsult remote “Second Opinion”). Please read these terms and conditions carefully, as your use of any of our Web sites constitutes your acceptance of these terms and conditions. If you do not accept any of the terms and conditions stated here, do not use any of our e-Cleveland Clinic sites. We may, in our sole discretion, change these terms and conditions at any time by updating this Web page. You are bound by all such modifications, and you are responsible for reviewing these terms and conditions on a regular basis. Your continued use of the Web sites constitutes your agreement to all such terms, conditions and notices.

PRIVACY STATEMENT / NOTICE OF PRIVACY PRACTICES
Please read our Privacy Statement and Notice of Privacy Practices to understand how your personal information will be treated as you make full use of our many features.

COPYRIGHT AND TRADEMARKS
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Step 1: Requestor Information

In this section we ask for basic registration information about you. This section takes about 5 minutes to complete.

Salutation

First Name
Middle Name
Last Name

Email Address

Shipping Address for consult

Address 2

City
State Province Region
Zip Code Postal Code

Country

United States

Day Phone
Evening Phone

Fax number

Sex

Employer:

I am requesting this consult for: myself
Step 2: Patient Information

In this section we ask for basic information about the patient. This section takes about 5 minutes to complete.

Salutation

First Name*  Middle Name  Last Name*  Suffix

Address of legal residence for patient:

Address 2

City*  State/Province/Region*  Zip Code/Postal Code*

***Due to State Medical Board restrictions, we are not allowed to offer remote second opinions to patients whose mailing address is in one of the following locations: Guam, North Dakota and California.***

Country*

United States

Social Security #

Date Of Birth*

Month  Day  1900

Sex*

Male

Marital Status:

Choose marital status

Employer:
Step 3: Select Condition

In this step, we ask that you enter the diagnosis provided for your first opinion. If you are unsure, enter a general term and then select a similar diagnosis from the list displayed. This is a significant step in your pursuit of a second opinion from e-Cleveland Clinic. Subsequent steps depend upon this information to complete your opinion request, thus once a condition has been selected you may not change it. If you have any difficulty during this step, you may contact us at 216.444.3223 or 800.223.2273 ext 43223. This step takes 1-5 minutes to complete.

Keyword Search | Choose by Department

Heart Disease
- Match ALL the search terms above
- Match ANY of the search terms above

Search

- Atherosclerotic Coronary Artery Disease $565.00 Checklist
- Congenital heart disease $565.00 Checklist
- Congenital heart disease (adult) $565.00 Checklist
- Congenital heart disease (pediatric) $565.00 Checklist
- Coronary artery disease $565.00 Checklist
- Fetal Complex congenital heart disease (during pregnancy) (not covered) N/A
- Gastric Ulcer $745.00 Checklist
- Gastric Ulcer Disease $745.00 Checklist
- Hypertension (not covered) N/A
- Hypertensive heart disease (not covered) N/A
- Inoperable coronary disease (eval for novel/new treatment) $565.00 Checklist
- Peptic Ulcer Disease $745.00 Checklist
Step 3: Select Condition

In this step, we ask that you enter the diagnosis provided for your first opinion. If you are unsure, enter a general term and then select a similar diagnosis from the list displayed. This is a significant step in your pursuit of a second opinion from e-Cleveland Clinic. Subsequent steps depend upon this information to complete your opinion request; thus once a condition has been selected you may not change it. If you have any difficulty during this step, you may contact us at 216.444.3223 or 800.223.2273 ext 43223. This step takes 1-5 minutes to complete.

Keyword Search | Choose by Department

- Match ALL the search terms above
- Match ANY of the search terms above

Search

Choose by Department:

- Anesthesia
- Cardiology
- Colorectal Surgery
- Dermatology
- Fetal Medicine
- Gastroenterology
- General Surgery
- Gynecology and Obstetrics
- Hematology and Medical Oncology
- Internal Medicine
- Orthopaedics
- Otolaryngology
- Pain Management
- Pediatric Gastroenterology
- Pediatric Hematology and Oncology
- Pediatric Neurology
- Pediatric Urology
- Pulmonary Medicine
- Rheumatology
- Thoracic Surgery
Step 4: Payment Process

In this step, we ask you to choose the method you would prefer to use to pay for the MyConsult remote consultation you are requesting. If you wish to use a credit card for payment, you may enter your credit card information in our secure environment below. If you choose to pay by certified bank check or money order, please select the “Pay via Check or Money Order” icon at the bottom of this page. When paying by certified bank check or money order, please make your check or money order payable to e-Cleveland Clinic, and include it with the checklist items you forward to e-Cleveland Clinic as part of your consultation. The cost of your consultation is listed below. This step takes about a minute to complete.

Please note the following important details regarding this payment process:

- Cost must be stated in U.S. Dollars.
- Please DO NOT SEND CASH.
- Credit card payments may be made using Mastercard, Visa or American Express.
- Certified bank checks and money orders must be from a US bank and in US funds, and be made payable to e-Cleveland Clinic.
- Third-party checks or money orders, personal checks, company checks, payroll checks, or traveler's checks cannot be accepted.
- Processing of your e-Cleveland Clinic MyConsult remote consultation cannot begin until payment is received.
- MyConsult requests that remain inactive for more than 60 days are automatically removed from the e-Cleveland Clinic system.

PLEASE NOTE:
At present, it is unlikely that your insurance carrier will reimburse you for this MyConsult remote consultation because specific procedure codes have not been assigned to Web-based consultations. Therefore the service is not usually recognized by insurance plans as a covered service. Please be advised that Medicare coverage excludes "evaluation services that are not provided face to face with the beneficiary." Please check with your insurance company to determine whether your plan will cover your MyConsult remote consultation in total or in part. The receipt for services rendered that is provided with each completed MyConsult remote consultation may be used by you should you seek reimbursement from an employer-sponsored medical savings account or insurance plan. At this time, e-Cleveland Clinic is unable to file a claim for remote consultation services with any insurance company.
Remote Medical Second Opinion

Step 5: Medical History
Diagnosis-specific Questions

If you are unable to complete this form in its entirety, please scroll down and click on the "Submit" button to save the existing information and return to the questionnaire.

What is the principal (chief) question or concern you have regarding your current condition?

In your own words, please provide a brief narrative of the details of the problem for which you are requesting a second opinion:

Has an immediate family member (parents, siblings) been diagnosed with heart disease?
- Not sure
- No
- Yes

If an immediate family member been diagnosed with heart disease, please provide the following information:

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Diagnosis</th>
<th>Age at diagnosis</th>
<th>Current condition of relative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Do you have a family history of early death related to heart attack or early manifestations of blockages in relatively young (younger than 55) family members?
- Not sure
Step 6: Checklists

The patient is required to submit a Proxy Consent Form in order to grant permission for the eCleveland Clinic staff to discuss their medical information with anyone other than themselves. In the absence of a Proxy Consent Form, our staff cannot share any confidential patient information.

**Note:** If someone other than the patient is completing this on-line request on the patient's behalf, a Proxy Consent Form is indicated. If the patient's husband, wife, friend, employee, etc. will be contacting the eCleveland Clinic staff on the patient's behalf, a Proxy Consent Form is also indicated.

Below is a list of the materials you need to mail to The Cleveland Clinic in order for your MyConsult service to be rendered. The materials include the following items:

- The actual films or studies that are necessary for our physicians to perform a thorough assessment. You may print this list and take it to your doctor or facility where your tests were performed.
- Your consent for a Cleveland Clinic physician to render your second opinion.
- Specific mailing instructions and a mailing label for the items on your information checklist.

Documents can be sent to eCleveland Clinic by mail, fax or uploaded directly from this page. If you choose to send documents by mail, please use a service that requires a signature from the recipient, such as Federal Express, DHL, or Express or registered US Mail. Additional mailing instructions and a mailing label are provided in a link below.

The fax number for eCleveland Clinic is 216.445.6911

Note: All medical records and reports must be in English. We do not provide translation services - all submissions must be translated prior to being submitted to eCleveland Clinic.

- List of medical materials
- Consent Form
- Mailing instructions and label
- Proxy Form (if you are requesting this opinion on behalf of the patient)
- Certified Check or Money Order
Step 7: Final Approval

Please note: Before giving your "Final Approval" in Step 7, please return to Step 6 and review the important information located therein.

Please review:
Consent forms: Please be sure to include all consent forms as outlined in Step 6. These include the following:
1) Patient Consent Form
2) Physician Consent Form
3) Proxy Consent Form (if someone other than the patient is the requestor)

List of materials which will need to be sent in to the e-Cleveland Clinic office. Please note the e-Cleveland Clinic mailing address carefully as an incompletely addressed package will not be routed to e-Cleveland Clinic. Be sure to obtain all of the required medical records listed in the checklist as outlined in Step 6. It is very important that you obtain the written reports, films, etc. and mail them to the e-Cleveland Clinic. In order to avoid delays, please DO NOT rely on the hospital or clinic to send these records. Please Note: If you have chosen to pay for your e-Cleveland Clinic MyConsult service by certified bank check or money order, please be sure to include your payment with the rest of the checklist items. Your MyConsult service cannot be processed unless payment is received.

When mailing your records please send them to the e-Cleveland Clinic office at:

MyConsult Triage - Desk H2-260
The Cleveland Clinic
9500 Euclid Avenue
Cleveland, OH 44195
U.S.A.

If Desk Location, H2-260 is not included in the address, records will not be received in the e-Cleveland Clinic Office.

It is recommended that the package containing your medical records be sent by an overnight courier such as FedEx or Airborne. This will guarantee a timely delivery as well as the ability to track a shipment that is not received.

Thank you for reviewing the important information contained in Step 6. We strive to respond to each patient quickly and efficiently, and your cooperation will help us avoid delays in the processing of your request.
Welcome Jane

Below is the status of your consults

<table>
<thead>
<tr>
<th>Patient Name</th>
<th>Product</th>
<th>Consult Status</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jane Doe</td>
<td>standard</td>
<td>Awaiting required documents</td>
<td>View</td>
</tr>
</tbody>
</table>

MyConsult Services

- **Remote Medical Second Opinion**
  Specialist consultations and second opinions for patients facing life-threatening and life-altering diagnoses.

- **Pre-Adoption Consultation**
  Online service to assist adoptive parents preparing to welcome a child into their lives.

- **Remote Cardiology Film Second Opinion**
  Expert imaging study analysis by Cleveland Clinic specialists

- **Nutrition Consultation**
  Look better, feel better, and take care of your heart and health with sound, personalized nutrition advice, any time, anywhere.
Second Opinion Consultation

Second Opinion Recommendations:

Mr. Doe has various options. These include observation, surgical resection, radiosurgery, fractionated radiosurgery and radiotherapy. I do not believe that medical therapy would be effective or indicated at this time other than symptomatic treatment with steroids - these should be tapered off as soon as symptoms allow.

Of these options, I believe that conformal radiosurgery (where the delivered radiation conforms to the shape of the tumor - such as delivered with the Gamma Knife) or fractionated conformal radiosurgery (such as delivered with the CyberKnife) are the best management options. Although observation is clearly an option, his headaches are likely to worsen and chronic steroid treatment is not a good alternative. Surgery on this lesion is certainly feasible, but its proximity to the middle cerebral artery and nerves to and from the right orbit (eye) mean there is real risk of disabling stroke or visual impairment in the right eye (it is unclear if he has any vision problems at this time - this should be assessed with formal visual testing and peripheral vision testing). Also, surgery of this lesion is not likely to be curative.

The extended control rate from radiosurgery of meningioma is upwards of 80%. The principal risk in this case would be a small risk of visual loss in the right eye or delayed brain edema (swelling). The risk of visual loss could be further lessened by fractionating the radiation (delivering lower doses in several sessions) but would require about two weeks of treatment. The Gamma Knife requires one day for treatment. There is no convincing evidence that Proton Beam radiosurgery is superior to Gamma Knife radiosurgery for meningioma - in fact, results of the Gamma Knife are generally held as the "gold standard" for radiosurgery. The Leksell system may also be able to provide single or multiple fraction conformal radiosurgery although there is much less published information on it than for Gamma Knife or CyberKnife.

In short, my recommendations are: 1) Get visual acuity and field testing, 2) taper off steroid (Medrol) as soon as symptoms allow, 3) Treat with either conformal radiosurgery or fractionated conformal radiosurgery in the near future.

References:

I am forwarding with this consultation written literature on the Gamma Knife. In addition, should the patient have additional questions regarding these recommendations as he prepares to make his decision regarding future care, he should not hesitate to contact the nursing staff at e-Cleveland Clinic, who are in contact with my clinical nurse specialist.

Physician Signature:
Gene H. Barnett, M.D. M.P.H.
Speedy Medical Report Spells R-E-L-I-E-F for Florida Retiree

"You can have some wacky thoughts when you’re waiting for answers," says Matt DeCunzo, a retired living in Coconut Creek, Fla. "The longer it takes, the longer you worry."

Anyone who has ever waited around for laboratory results or other medical tests can understand what DeCunzo means. It is only human to wonder: "Will the test show that I need surgery? Will it reveal that the blood in my urine is due to kidney failure? Or will it determine that the growth is cancer?"

In DeCunzo’s case, he was wondering what to do about his heart. Should he have additional stents inserted in his arteries? Should he have bypass surgery? Or should he just stay on his medications and see what happens? When it’s your heart and your life, these decisions are of great consequence.

"While my wife and I were wondering what to do, my daughter stepped in to help," he says. A registered dietician who developed programming for ediets.com, an online nutrition service, DeCunzo’s daughter is familiar with how people can benefit from electronic, Web-based services. Consequently, she suggested that her father use MyConsult, Cleveland Clinic program.

MyConsult online medical second opinion program is a sophisticated, Web-based extension of Cleveland Clinic’s Big-four-year role as one of America’s most respected referral institutions. The secure, online service provides remote medical second opinions from Cleveland Clinic specialists for more than 1,000 life-threatening and life-altering diagnoses. "The best part of using MyConsult was that it was extremely fast," says DeCunzo. "We mailed everything out on a Friday, and we got the report from the Cleveland Clinic the following Wednesday. They agreed with everything my doctors here had said, and they gave a prognosis on what to expect in the future."

"The worst-case scenario would be that I’d have to have open-heart surgery," he adds. "If it came to that, I’d go up to the Cleveland Clinic because they’re rated as the best."

Overcoming Health Problems

DeCunzo’s medical worries began in 1996 when he developed lymphoma, a cancer that originates in the lymphatic system. Despite chemotherapy and radiation treatments, the cancer recurred three years later, and DeCunzo had a stem cell transplant. In 2003, he had another recurrence. This time he was given medications to control the cancer.

"From ’99 on, I was always getting short winded," DeCunzo says. "The doctors told me my lungs were damaged from the extensive chemotherapy I had, which made them unable to expand to full capacity. But a pulmonary doctor said that we’d better do a stress test to make sure it wasn’t heart trouble."

It was fortunate that they conducted the stress test because DeCunzo’s shortness of breath was related, at least in part, to coronary artery disease, which may have been exacerbated by the radiation therapy or treatment he underwent. A heart specialist near his home repaired his heart by inserting two stents, which are special tubes used to widen

Newly retired, DeCunzo wants to be in good health, as he looks forward to enjoying more leisure time with family and friends. He moved to Florida from Brooklyn, N.Y., in 1997 when he was transferred with Pan American Airlines. When the air carrier went out of business, he began working for his hometown, the City of Coconut Creek, as facilities supervisor. He retired several months ago.

"It’s been six months now since I had the two stents put in, and I’m feeling good," he notes. "It took a stress test recently and things seem good. Whenever the weather is nice enough, I go for walks with my wife, Catherine. Life is good, and my mind is at ease, thanks to the Cleveland Clinic MyConsult program and my doctors. It also helps to have faith."
Triaging Second Opinion Requests

What is an Online Medical Second Opinion?

From the comfort of their home, patients can utilize the MyConsult Online Medical Second Opinion program to request a review of their records. Cleveland Clinic experts will then review the patient’s medical records and diagnostic tests and render a customized second medical opinion that includes treatment options or alternatives and recommendations regarding future therapeutic considerations.

How do I know when to offer an Online Medical Second Opinion to a patient?

- The patient wants medical advice and/or a physician to review their medical records without having to travel to the Cleveland Clinic
- If the patient specifically requests a second opinion through our secure eCleveland Clinic website

Referring to the MyConsult office can be achieved by one of the three (3) ways listed below:

<table>
<thead>
<tr>
<th>Option</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit the eCleveland Clinic website</td>
<td><a href="http://www.elevelandclinic.org">www.elevelandclinic.org</a> (Click on the MyConsult option and follow the information which can be found online)</td>
</tr>
<tr>
<td>e-mail the eClevelandClinic / MyConsult Office</td>
<td><a href="mailto:elevelandclinic@ccf.org">elevelandclinic@ccf.org</a></td>
</tr>
<tr>
<td>Call the eClevelandClinic / MyConsult Office</td>
<td>1.216.444.3223 (direct)</td>
</tr>
<tr>
<td></td>
<td>1.800.223.2273 ext. 43223 (toll free)</td>
</tr>
</tbody>
</table>
Cleveland Clinic MyConsult

MyConsult Online Medical Second Opinions delivered to 66 nations world-wide
After being diagnosed with a heart condition requiring surgery by his doctor at home in Arizona, Mr. Jones goes online to request a MyConsult remote second opinion from a cardiology specialist at The Cleveland Clinic. Mr. Jones fills out online medical questionnaires and sends required scans and test results to eCleveland Clinic. In three days Mr. Jones receives his second opinion verifying that he needs surgery.
Because The Cleveland Clinic is considered a national center of excellence for heart surgery, Mr. Jones schedules his surgery and flies to Cleveland. Before he leaves, he asks his physician to sign-up for DrConnect so that he can participate in the care Mr. Jones receives in Cleveland.

Every aspect of the care Mr. Jones receives is documented in the eCleveland Clinic MyPractice electronic medical record system. That same vital information is shared in real-time with Mr. Jones’ physician at home through DrConnect, maintaining continuity of care and strengthening the collaborative relationship between physicians.
Before he is discharged, Mr. Jones signs up for MyChart so that he can securely connect to his own personal health information and receive messages from his care team anywhere there is an Internet connection.

Then he travels to Florida to spend a month with his sister while he recuperates.
While he is in Florida, Mr. Jones uses My Monitoring to send data from his implanted cardiac pacemaker/defibrillator directly into his medical record so that his Cleveland Clinic physicians can follow his progress.
Now fully recovered, Mr. Jones returns home to Arizona where he receives his ongoing follow-up care from his own physician while staying connected to his Cleveland Clinic care team through the eCleveland MyMonitoring, MyChart, and DrConnect for his local physician.

As follow-up with his Cleveland Clinic specialist, Mr. Jones utilizes a VirtualVisit suite at a Florida hospital. His physician in Cleveland exams him and discusses his status without the need for Mr. Jones to travel back to Cleveland for his appointment.
Now fully recovered, Mr. Jones returns home to Arizona where he receives his ongoing follow-up care from his own physician while staying connected to his Cleveland Clinic care team through the eCleveland MyMonitoring, MyChart, and DrConnect for his local physician.

Result: At every point, nationwide, every caregiver responsible for the treatment Mr. Jones received had all the information they needed, where and when they needed it.

And with MyMonitoring and MyChart, Mr. Jones is still connected to his physicians, from home, or wherever he has access to an Internet connection.
Example: MyConsult On-line Second Opinion
Example: MyConsult On-line Second Opinion

• “Minimally Invasive Hip Replacement”
  – 60yo M, active, right hip OA
  – LS disease, colorectal CA resected 10 years ago

• MIS 2 incision THR June 2003 (“non-invasive”)
  – Femoral head removed piecemeal, high neck cut recut
  – Unrecognized calcar / trochanter fracture
  – Abduction failure and pain, gait abnormality
  – Treated nonoperatively

• 18m postop ORIF with wires
  – Failed immediately, wires broken, more pain than preop
Example: MyConsult On-line Second Opinion
Not So Minimally Invasive

• Presentation
  — Unrecognized intraoperative complication
  — Failed delayed repair
  — Loosening by bone scan (femur and acetabulum)
  — ? infection

• Diagnosis incorrect
  — Concern for infection
  — Concern for loosening of hip replacement implants

• Treatment incorrect
  — Infection evaluation required
  — Possibly loose implants
  — Surgery recommended for correction and fixation
MyConsult, Surgery and Follow-up
MyConsult Online Medical Second Opinions

• Increases access, quality and value
  – Formalize second opinion process and triage
  – Second opinion requires data from primary opinion
  – Removes the geographic barriers to care

• Improves efficiency for patients, their doctors and consultants
  – Organizes staff functions for patient encounter
  – Consistent patient care with proactive nursing follow-up
  – Empower patients with convenient access to personalized information

• Receive the second opinion
  – From well-known physician and well known institution
  – Patient and family satisfaction high
  – Significant health care cost implications

• New way of requesting and receiving health-related services
  – Anytime, anywhere
MyConsult Outcomes

• Patients
  – Age 50.3 years
  – Male 66% Female 33%

• Diagnosis
  – Correct 92% With changes 15%
  – Incorrect 8%

• Treatment
  – Correct, no change 35%
  – Minor changes 30%
  – Moderate changes 20%
  – Major changes 15%

• Significant health care cost implications
eHealth Services Offer the Contemporary Healthcare Consumer

• Transition from a provider-driven to a consumer-driven model of healthcare delivery

• Empowered patients with enhanced and convenient access to personalized and reliable health-related information

• A whole new way of requesting and receiving a variety of health-related services anytime, anywhere
Delivering e-Health Services to Improve Health, Wellness and Patient Safety
Together, we are transforming healthcare.

Be at the forefront of today’s electronic medical record (EMR) movement. Cleveland Clinic is a recognized leader in the use of integrated EMR systems, resulting in improved efficiency and enhanced ability of physicians to deliver quality care to their patients.

Here’s one Cleveland Clinic technology solution ideal for you and your practice.

DrConnect™
You know your patients best. Stay connected to their care at Cleveland Clinic with instant secure online access to their progress.

Cleveland Clinic

To learn more, visit clevelandclinic.org/ecc
The Evolution of Digital Medicine: Innovation at Cleveland Clinic

Jonathan L. Schaffer, MD MBA
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Center for Adult Reconstruction and Joint Replacement
Program Director, Advanced Operative Technology Group, Orthopaedic Research Center
Orthopaedic and Rheumatology Institute