

ELEVATING THE PATIENT CARE EXPERIENCE THROUGH TECHNOLOGY AND AI

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FINANCIAL DISCLOSURES

- Co-Founder Dr. Contact Lens
- Medical Advisory Board- OSRX Pharmacy
- Principal Investigator- STAAR Study
- Medical Advisory Board- Visus
- Key Advisor- PERC
- Speaker Bureau- Bausch & Lomb Specialty Vision Products
- PAC- Coopervision
- PAC- Johnson & Johnson

WHY ARE WE HERE ... TO SKI



- Start thinking of ways AI can help you take better care of your patients and your clinic
- Understand the amount of data you are sitting on, what is worth and how to use it
- Get and stay in the mindset of being patient centric
- Get back to your why
- Front vs back of the house technology
 - Simplify processes to improve experience

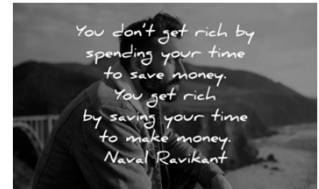
TIME IS MONEY

- Thank you for being here!

“You either pay for things with time or money.”

© JOSEPH HOLLAK

Now it is time, money and attention...



KEEP LEARNING

NOT ALL READERS ARE LEADERS BUT ALL LEADERS ARE READERS
HARRY S. TRUMAN



Don't become MYOPIC!

The only difference between *fear & excitement* is your attitude about it

THE FUTURE OF HEALTHCARE IS THROUGH EYECARE



HENRY FORD AND INNOVATION

"If I asked the public what they wanted, they would have said a faster horse."

- Henry Ford, founder of Ford Motor Company



Ada Lovelace (1815-1852)

Thomas Edison (1847-1931)

Nikola Tesla (1856-1943)

Albert Einstein (1879-1955)

Grace Hopper (1906-1992)

Steve Jobs (1955-2011)

Tim Berners-Lee (1955-)

Elon Musk (1971-)

Thomas Edison (1847-1931): An American inventor and businessman who developed many devices such as the phonograph, the motion picture camera, and the electric light bulb.

Albert Einstein (1879-1955): A German-born theoretical physicist who developed the theory of relativity, one of the two pillars of modern physics, and won the Nobel Prize in Physics in 1921.

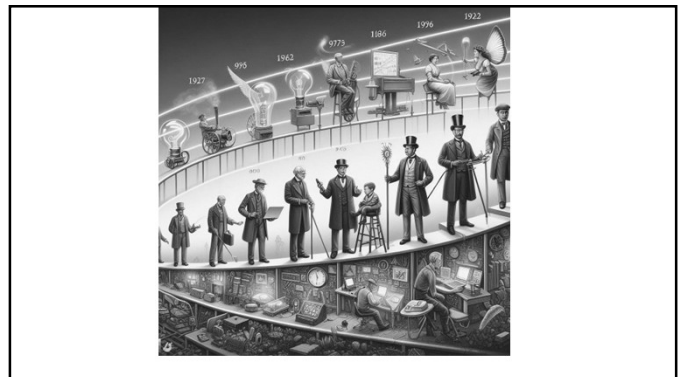
Steve Jobs (1955-2011): An American entrepreneur and co-founder of Apple Inc., who revolutionized the fields of personal computing, music, and mobile phones.

Ada Lovelace (1815-1852): An English mathematician and writer who is widely regarded as the first computer programmer, as she wrote the first algorithm for Charles Babbage's Analytical Engine.

Grace Hopper (1906-1992): An American computer scientist and naval officer who invented the first compiler.

Nikola Tesla (1856-1943): A Serbian-American inventor and engineer who contributed to the development of alternating current, wireless communication, and many other technologies.

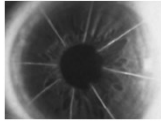
***Tim Berners-Lee (1955-):** A British computer scientist and inventor of the World Wide Web, a system of interlinked hypertext documents that can be accessed via the Internet.



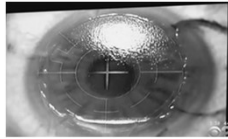
OUR PROFESSION AND DISRUPTION



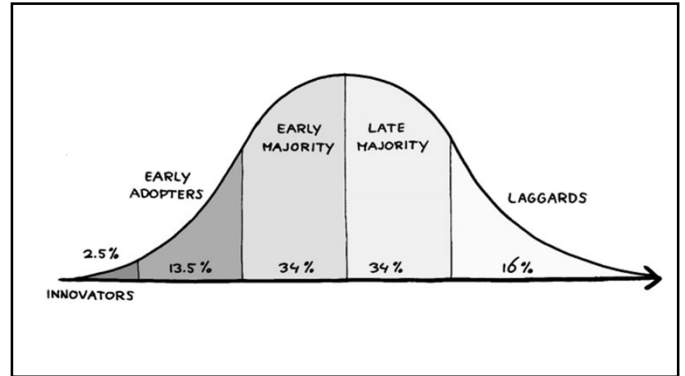
1970's



1970's
1978 FDA
Approval



1980's
1999 FDA
Approval



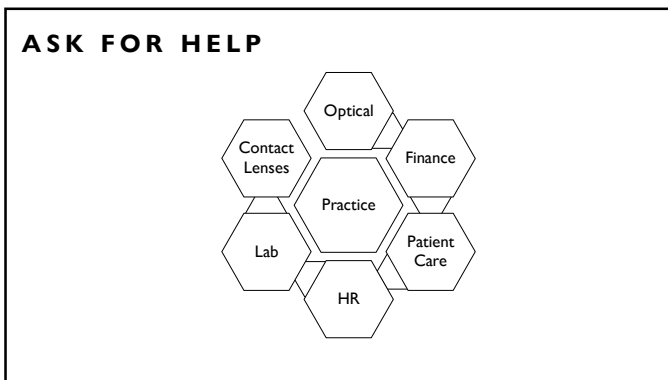
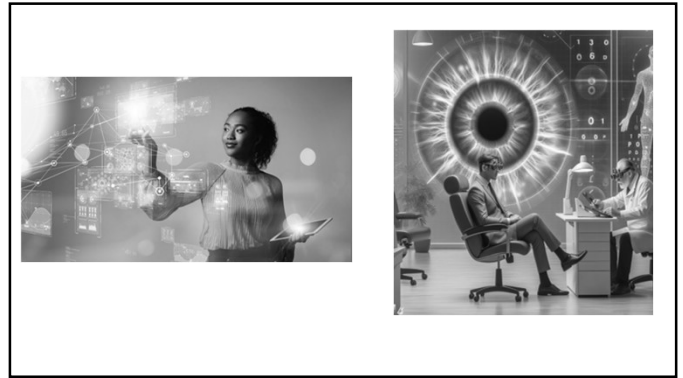
THE PROCESS OF CHANGE



**Are you Problem Aware
but
Solution Confused?**



	Business	Science
Business	Business/ Business	Business/ Science
Science	Science/ Business	Science/ Science



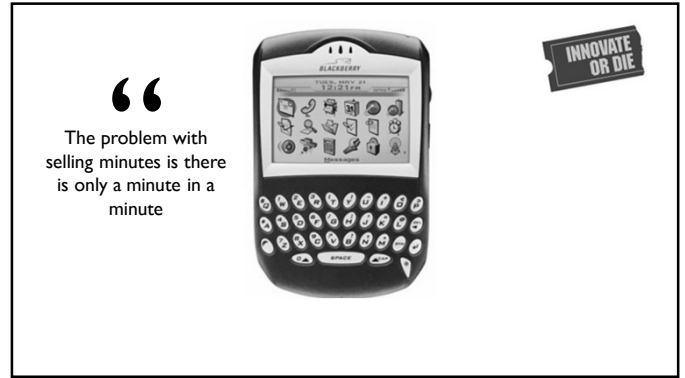
DO YOU OWN A JOB OR A BUSINESS

- Buy Back Your Time- Dan Martell
- 10x is Easier than 2x
- The Success Principles- Jack Canfield
- The Five Dysfunctions of a Team- Patrick Lencioni
- Good to Great- Jim Collins
- Competition is for Losers (TED Talk)- Peter Theil
- The 20 Minute VC Podcast- Harry Stebbings
- Masters of Scale Podcast- Reid Hoffman
- SaaSr Podcast
- YouTube: Productivity Game

MARCH 2020...

© marketoonist.com

JETSON PREDICTIONS 1962



HAPPY ANNIVERSARY IPHONE

**15 YEARS ANNIVERSARY
EVOLUTION OF THE IPHONE AND IOS**

On 29th June 2007, the original iPhone was released following Steve Jobs' announcement at the Macworld conference earlier that year. Over the years, numerous technological milestones and the iPhone's journey has led to today.

2007

1.39 MILLION IPHONES

How much is the first iPhone worth today?

(The Hill) – A 2007 first-generation iPhone sold for \$63,356 at LCG Auctions on Sunday, Feb 21, 2023, exceeding expectations of around \$50,000.

<p>iPhone</p> <p>6.7" (177.8mm) glass, 15.49" (393mm) aluminum</p> <p>Camera: 12MP Wide, 12MP Ultra Wide, 12MP Telephoto</p> <p>Processor: Apple A17 Pro</p> <p>Memory: 128GB, 256GB, 512GB</p> <p>OS: iOS 17</p> <p>Price: \$1,199</p>	<p>iPhone 13 Pro</p> <p>6.1" (154.9mm) glass, 14.75" (375mm) stainless steel</p> <p>Camera: 48MP Main, 12MP Ultra Wide, 12MP Telephoto</p> <p>Processor: Apple A16 Pro</p> <p>Memory: 128GB, 256GB, 512GB</p> <p>OS: iOS 16</p> <p>Price: \$1,099</p>
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Apple Health

- Stand goal
- Breathe
- Heart rate monitoring/EKG/Pulse
- Fitness tracking
- Screen time
- Sleep
- Oxygen level
- Mental Status
- Medications
- Noise level

What Is AI or Artificial Intelligence?

Artificial intelligence or AI is the branch of computer science that studies machine intelligence.

EXAMPLES OF APPLICATIONS

- Search engines (Google)
- Content recommendations (Netflix, YouTube)
- Self-driving vehicles
- Automatic language translation
- Facial recognition
- Computer games
- Spam filters

An AI is a computer system that performs tasks that usually require human intelligence.

sciencenotes.org

8 Definitions of Artificial Intelligence

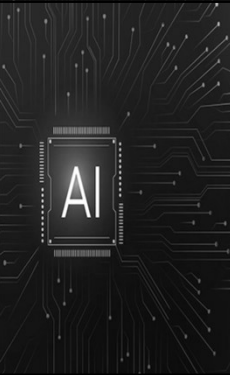
Artificial Intelligence Philosophy AI-Ethics

Machine Learning Responsible AI AI-Regulation


by Murat Durmus

TYPES OF AI

- ANI (Artificial Narrow Intelligence)- specific, predefined tasks
 - Tag people in photos
- AGI (Artificial General Intelligence)- understand, learn and adapt
 - Siri, Amazon Alexa
- ML (Machine Learning)- development of algorithms to make predictions or decisions based on data
 - Prescription data
- Deep Learning- used in tasks like image and speech recognition
 - Understanding data quickly
- NLP (Natural Language Processing)- understanding, interpreting and generating human language
 - chatbots, language translation
- Computer vision- understand and interpret visual images
 - self driving vehicles, retinal photos



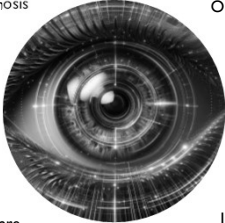
Innovation can take care of problems you didn't know you had



THE "CLOUD"



AI AND OPTOMETRY/HEALTH CARE



Enhance Diagnosis	Optimize Outcomes
Enhance Treatments	Improve Workflow
Personalize Treatment Plans	Speed up recognition
Optimize Patient Care	Treatment Predictions
Speed up Care	Analyze Data
Optimize Patient Care	Improve Cost of Care

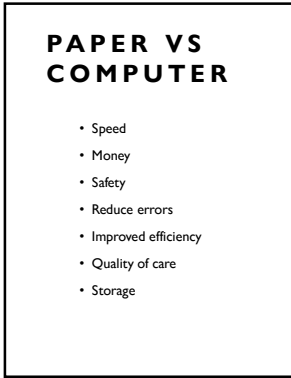


work
s harder
not
smarter



ENHANCING WHAT WE DO

- AI should not only enhance patient care but how we take care of the patient
- Filling our "down time" with more patients
- Create the clinic you want to create



PAPER VS COMPUTER

- Speed
- Money
- Safety
- Reduce errors
- Improved efficiency
- Quality of care
- Storage



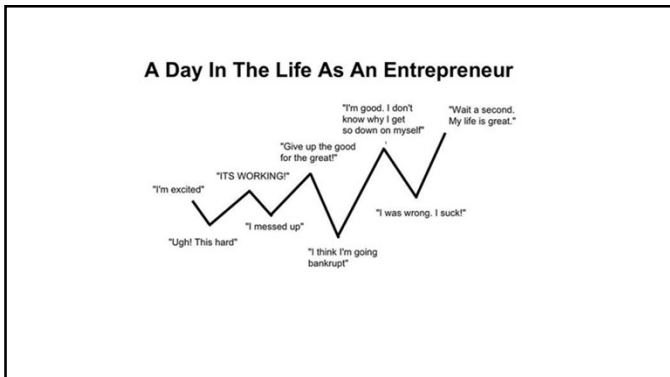
AI AND PATIENT CARE

- Detect pathology earlier
- Detect heart disease, diabetes, Alzheimer's earlier
- Analyze pathology to determine treatment plans or determine better referral patterns
 - Dry Eye Protocols
 - Glaucoma Protocols
 - Myopia Protocols
 - Diabetic Protocols



AI AND WORKFLOW

- Automate routine tasks
- Analyze patient data
- Website chatbots
- Analyze phone calls and missed opportunities
- Assist in documentation
- Analyzing charts for better treatment recommendations
- Cut out double data entry

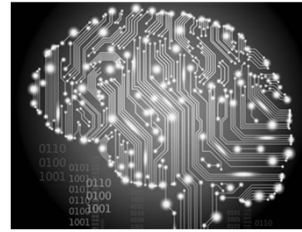


HOW TO EVALUATE TECHNOLOGY

- Instead of asking "what will this cost me"... ask yourself "what will this cost me if I don't do this?"
 - What is the investment
- What is the ROI
- Onboarding process
- Customer support
- Be easy on the bugs



EHR'S AND INTEGRATIONS



THE CURES ACT

By December 31, 2023, EHI export capability must be made available through APIs upon authorized request. 170.315(b)(10) criterion for

BE CAREFUL OF "FREE"

- Don't give your patient data away for free!
- If you are getting something for free remember you are the product



If it seems too good to be true, it probably is.

"There are only two industries that call their customers "users": illegal drugs and software." – Edward Tufte

\$1600

LTV= \$350 x 6= \$2100

THE MAGIC TRICK



ROI- TRULY EVALUATE AND UNDERSTAND IT!



Team Member Expenses	Team Member Earning Potential	Technology/ Piece of Equipment	Potential Revenue \$200k
- \$16/hr → \$22/hr (with benefits/ taxes/workman's comp/toilet paper)	\$150k/team member	- \$1.55/hour	+ 104/hr
- \$176/day	+ \$78/hour	- \$12.45/day	+ \$833/day
- \$3520/month	+ \$625/day	- \$249/month	+ \$16,000/month
	Net = \$56/hr		Net = \$103/hr
	Net = \$ 8,980/month		Net = \$ 15,751/month

20 working days/month

TEAM IMPLEMENTATION



Not making a decision is actually a decision. It's the decision to stay the same.

LYSA TERKEURST

IMPLEMENTATION - TEAM EMPOWERMENT

2024



**NETWORK
=
Networth**

WHAT IS A HEALTHCARE DISRUPTOR

- Companies who are shifting the healthcare industry by making big changes that significantly redefine the way care is delivered
- This means:
 - integrating new technologies
 - streamlining processes
 - simply refusing to do things the way they've always been done



Amazon buying One Medical is only its most recent dive into the health care industry

July 26, 2022 - 1:00 AM EDT
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\$3.9 Billion

THE EXPERIENCE...

SEATTLE & SAN FRANCISCO--(BUSINESS WIRE)--Jul. 21, 2022-- Today Amazon (NASDAQ:AMZN) and One Medical (NASDAQ:ONEM) announced that they have entered into a definitive merger agreement under which Amazon will acquire One Medical. One Medical is a human-centered, technology-powered national primary care organization on a mission to make quality care more affordable, accessible, and enjoyable through a seamless combination of in-person, digital, and virtual care services that are convenient to where people work, shop, and live.

"We think health care is high on the list of experiences that need reinvention. Booking an appointment, waiting weeks or even months to be seen, taking time off work, driving to a clinic, finding a parking spot, waiting in the waiting room then the exam room for what is too often a rushed few minutes with a doctor, then making another trip to a pharmacy – we see lots of opportunity to both improve the quality of the experience and give people back valuable time in their days," said Neil Lindsay, SVP of Amazon Health Services. "We love inventing to make what should be easy easier and we want to be one of the companies that helps dramatically improve the healthcare experience over the next several years. Together with One Medical's human-centered and technology-powered approach to health care, we believe we can and will help more people get better care, when and how they need it. We look forward to delivering on that long-term mission."



WHY DO THEY WANT TO DISRUPT

- Cost
 - Amazon, Berkshire and JPMorgan are among the largest private employers in the U.S., with a more than 1 million workers combined
 - Health-care spending = ~18 % of the U.S. economy in 2018
- Too Much Care
 - 20 percent of medical care was unneeded
 - including about a quarter of tests
 - a fifth of prescriptions
 - more than one in 10 medical procedures

Amazon, Berkshire, JP Morgan to form new Health-Care Company



<https://gasparinsurance.com/amazon-entering-health-care/>

WHAT DOES IT TAKE?

- ✓ Break existing norms-
 - "Do things really need to be this way?"
- ✓ Shape our culture-
 - Simply rethink the way things have always been done—in a big way.
 - When healthcare is a lot less confusing, costly, and frustrating for everyone, it is a win
- ✓ Behave with authenticity/transparency- consumers are searching for authenticity
 - Transparent pricing models and clear policies



CULTURE SWIFT

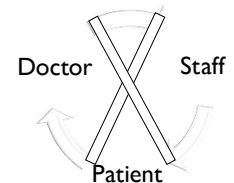


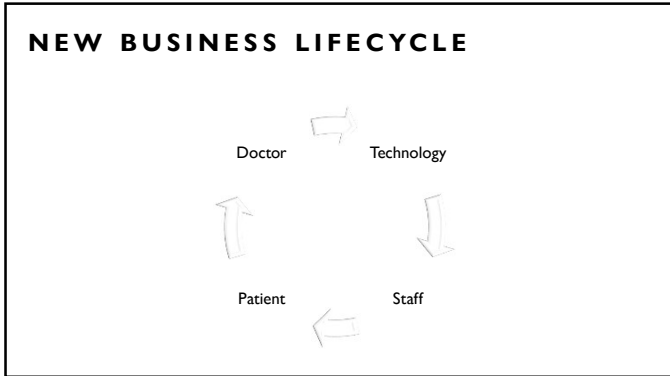
WHAT DOES IT TAKE?

- ✓ Engage people and leverage networks
 - Making connections along the way
 - They know how and when to partner
- ✓ Reinvent business models
 - Take into account a person's total well-being
- ✓ Envision ongoing enhancements
 - Disruptors are two steps ahead and constantly thinking about what people need and innovating around that.



BUSINESS LIFECYCLE





WHERE DO WE GO WRONG IN THIS MODEL

- We are not truly taking care of the patient by not considering their wants and needs
- We are not truly valuing our teams time
- We have our team doing low profit/mundane tasks
- Looking for ways to cut corners to see more patient's
- We aren't implementing ways on how we are consumers

DELEGATE TO ELEVATE

= 51%

BUSY → CONVENIENCE

- Amazon
- Uber
- Meals
- Zoom
- Grocery Delivery
- House Cleaner

PATIENTS WANT THINGS ON THEIR TIME

- Making appointments
- Ordering contacts
- Shopping for glasses
- Online vision tests

Buying online is easier

Long wait times

Too hard to get back

Online refractions

Office isn't open 24-7

BEING THERE FOR OUR PATIENTS

7-ELEVEN

Telemedicine: A Cure for Optometrist Burnout?

PATIENT CENTRIC CARE

- Starting with the patient in mind with everything you do
- Taking care of the patient from start to finish
- Innovating for the patient experience
 - This includes charging patients the right amount for what you do
- Giving them the control they are asking for and needing
 - Some patient's know how to ask, most don't or worse won't (even if they wanted to)
 - They may not even know what to ask for



WHAT HAPPENS IF WE ARE TRULY NOT PATIENT CENTRIC

- We end up with unhappy patients → resentment
- We look greedy
- We get bad reviews
- We take it personally

I unfortunately got a one star review online because I had not put the patient's PD on their prescription. Who puts the PD on their patient's prescriptions?

Never 513 votes



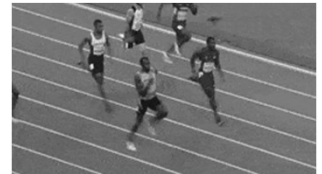
WORK LIFE BALANCE



TECHIFEYE THE PATIENT EXPERIENCE START TO FINISH

tech·if·eye *noun*

An optical practice that integrates one or more revenue generating technologies to optimize the patient experience and maximize profits



START WITH THE PATIENT IN MIND

- What kind of experience do you want?
 - Friendly staff and service
 - Running on time
 - Technology up to date
 - Convenient
 - Easy



IF PATIENTS HATE IT YOU SHOULD CHANGE IT!

- Start at the beginning
- Walk through start (if there needs to be)

AUTOMATION

- What can we automate?
 - Reviews
 - Appointments
 - Appointment reminders
 - Paperwork
 - Contact lens ordering
 - Calling for pickups

NEEDING AN APPOINTMENT

- How do patient's find us?
- New patients-
 - Who takes my vision plan?
 - Who has good reviews?
 - Is it close to me?

YOUR WEBSITE

- Your phone number
 - Be able to call and/or text
- Reviews
- LIVE Online Scheduling
- Patient Registration/online forms
- Ordering contact lenses
- Glasses try-on/ordering
- Chatbot
- Is it ADA compliant

WEBSITE CHATBOTS

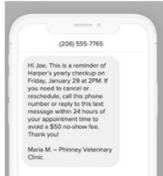
- People are on our websites less than 17 seconds
- People are looking for specific items
- Commonly asked questions
 - What are your hours
 - What insurance do you take
 - Can I make an appointment
- Cut down on phone time
- Be available when your office is closed

3 AM

WEBSITE LIVE CHAT

NEEDING AN APPOINTMENT

- Existing patients-
 - Did I have a previous good experience?
 - Did I get reminded?
 - Old school vs new school
 - When can I go in?



PATIENT RECALL

- Evaluate your method and effectiveness
- Most patients need to hear from you in 3 forms
 - Text
 - Call
 - Postcard
- Pre appointing
- Getting staff involved on downtime
- Don't be scared to remind patients

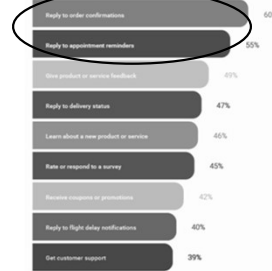


CALL VS TEXTING

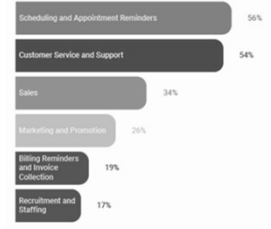
- 27 trillion text messages were exchanged in 2020
- 95% of texts will be read within 3 minutes of being sent, with the average response time for a text being 90 seconds
- 84% of consumers won't answer a call from an unknown caller
- 98% open rate for text message vs 20% for email
- 74% of people have zero unread text messages on their phone vs 17% zero unread email
- 45% response rate from text message vs 6% with email



Why Customers Text a Business



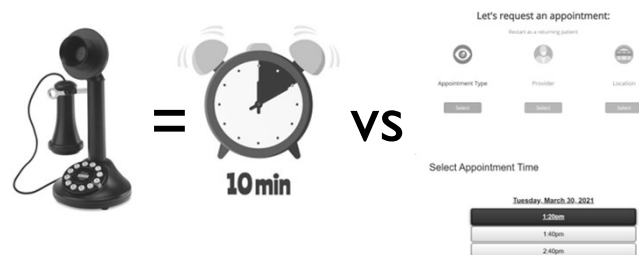
Why Businesses Text Customers



POSTCARDS



MAKING THE APPOINTMENT



ONLINE APPOINTMENT BOOKING

- 2017 70% of patients surveyed want the ability to make, change or cancel an appointment online
2.4% of appointments are self booked
- 2020 71% prefer to schedule online and to receive digital reminders rather than by phone contact
11% of appointments were booked online
- 2023 95% prefer to schedule online
35% of respondents were able to book online

<https://www.scisolutions.com/uploads/news/Missed-Appnts-Cost-HMT-Article-042617.pdf> (2017)

<https://www.softwareadvice.com/resources/how-patients-use-online-reviews/>

LIVE SCHEDULING

76% of Millennial respondents would be more likely to choose a **new healthcare provider** who offers online scheduling over one that does not

APPOINTMENT REMINDERS

COMMENTARY

Health Management
TECHNOLOGY

Missed appointments cost the U.S. healthcare system \$150B each year

AUTOMATING APPOINTMENT REMINDERS

- Text vs Email
- 3 days prior
- 1 day prior
- Day of appointment
- Cancellation Policy



CHECKING PATIENT BENEFITS

- Average practice have a dedicated staff member to check/pull patient benefits
- Utilize for family member appointments
- ~40% of benefits for eye exams/eyewear go unused



PATIENT FORMS

- How to get people to do it?
 - Starts with the staff
 - Incentives
 - Blame COVID
- Text links
- Are they easy to use/access
- Is it integrated with your EMR
- Double data entry
 - Double questions



THE EXAM- WHICH IS BETTER



1



2

THE EXAM- ARE YOU USING TECHNOLOGY TO YOUR ADVANTAGE?

- Topography
- Meibography
- Autorefraction
- Virtual Visual Field
- Ultra Wide field camera
- OCT and/or OCT-A



THE EXAM



SWITCHING FROM PATIENT TO CONSUMER

- New term: healthcare consumers versus patient
- Patient quote "I want to support my eye doctor, but I am not a charity."
- We want them to stay patients, while everyone else is treating them as a consumer
- Who owns the patient? The vision plan or you?



TRANSITIONING FROM PATIENT TO CONSUMER



THE HANDOFF

- How is it done
 - In the exam room
 - Out in the optical
- Who is involved
 - Doctor
 - Technician
 - Optician



THE OPTICAL

- How are you taking measurements
- How are you presenting optical purchases to patients
- Are we missing co-pays and balances?



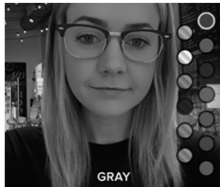
PACKAGE DEALS FOR WALKING SCRIPTS



- Cohesive brand
- No one wants cheap looking frames
- Look at the true economics
- Offer value

SIMPLE AFFORDABLE PRICING

ONLINE VIRTUAL TRY ON



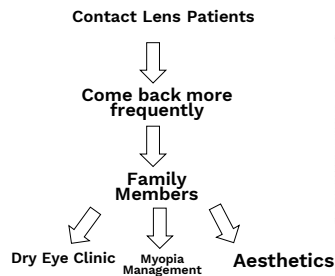
E-COMMERCE AND OUTSIDE THREATS AND TARGETING OUR PATIENTS

CONTACT LENS ORDERING

- Evaluate your process
- Utilizing direct ship to the patient
- How are you going after reorders
- Trial lens ordering



MVP's- Most Valuable Patients



FTC RULING...



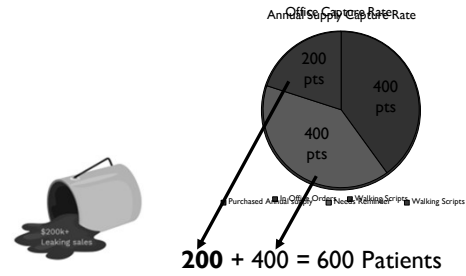
As detailed in a final notice of rulemaking to be published shortly, after a contact lens fitting, prescribers will be required to do one of the following to confirm that a patient received their prescription:

- request that the patient acknowledge receipt of the contact lens prescription by signing a separate confirmation statement;
- request that the patient sign a prescriber-retained copy of the prescription that contains a statement confirming the patient has received it;
- request that the patient sign a prescriber-retained copy of the sales receipt for the examination that contains a statement confirming the patient received the prescription; or
- provide the patient with a digital copy of the prescription, and retain evidence that it was sent, received, or made accessible, downloadable, and printable.



WHAT DOES OFFICE CAPTURE RATE AND ANNUAL SUPPLY CAPTURE RATE REALLY MEAN?

1000 CL Patients



PATIENTS WALKING

1 patient per day x 100 doctors = 100/day
5 days = 500/week
45 weeks = 22,500/year

\$7 Million

WHEN ARE PATIENTS ORDERING



135 Hours of Team Time x \$20 = \$2,709

SHIP IT HOME!



**FREE Shipping
by Amazon**

Annual Supply of Contacts: \$300
Shipping: \$7.99
Total: \$307.99

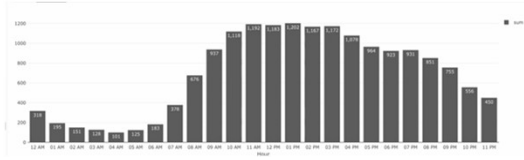
Annual Supply of Contacts: \$307.99
Shipping: \$0.00
Total: \$307.99

SEEK WELL

Welcome to SeekWell

SeekWell is the parent company of 1-800 Contacts, Luna, and Hello Eyes. Our goal is to make it simpler, easier, and more accessible for people to get the vision care they need. We maintain the legendary, award-winning culture 1-800 Contacts started almost 30 years ago and continues to develop innovative, disruptive products and businesses that make consumers cheer and optometrists squirm.

WHEN DO PATIENTS WANT EXAMS



DON'T BE THE FROG



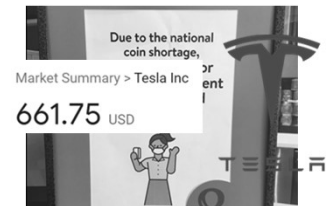
PAYMENT OPTIONS

Nearly 40% of Americans can't cover a surprise \$400 expense

62 million Americans do not have vision insurance.

CHECKOUT

- POS system
- Credit
- Debit
- Tap/Swipe/Insert
- Apple Pay
- Bitcoin



BUY NOW PAY LATER

Charge patients the right amount!
You are the expert!



You are not a bank



Patients Want to Pay-over-time

74%
would upgrade or buy more with Buy Now, Pay Later



APPROVED
90% approval rate

30-sec
Tech-drive in application

No Risk
No hard inquiry to apply or accept

3, 6 or 12
month flexible payment plans

- Hard credit check if approved
- Takes 5-10 minutes
- 30-50% approval
- Possible chargebacks

Min. Purchase: \$60 | Max Approval: \$3,000

DIFFERENTIATE- SELL WHAT YOU RECOMMEND

- Dry Eye Clinic
- Myopia Control Clinic
- Scleral Lens Clinic
- Aesthetics

LITTLE WOW FACTORS

- No puff test
- Baby changing table
- Door hooks
- New paint
- New equipment
- Tigerchart

UPDATE YOUR OFFICE

EASY, FIXABLE, LEAKY BUCKETS

- In office advertising
 - Show your patients what kind of patients you want to see
 - Dry Eye Clinic
 - Myopia Management
- Buy now pay later
- Online contact lens ordering

COMING UP WITH A PLAN

- Ego aside
- Remember how you shop and how YOU purchase and receive things
 - We shop on websites we remember and frequent often
- Get your staff involved with the decision making and with demos of products
 - It comes down to you implementing it, your staff and patients applying it and accountability throughout the process
- Focus on one new to do every 90 days

THE WORD TRY...



**THE DISRUPTERS CAN AND WILL
BECOME THE DISRUPTORS...
BUT WE HAVE TO BE THE ONES TO
HELP OUR PATIENTS AND OUR
PRACTICES!**



THANK YOU!



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