COVID 19 Experience in Primary Care at Northwell Health

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She is a 40-year-old mom of two. She is married to her college sweetheart. She is a marathon runner - ran Boston and NYC marathon last year. She lives in Brooklyn. She is a security officer in a public high school. She does not smoke, has no past medical history.

10:01pm: she calls on-call service with a chief complaint of – “thinks she has COVID-19 infection”

10:05pm: operator connects you – you are only able to hear a whisper. She is unable to complete a full sentence without pausing

10:07pm: you call EMS to request immediate assistance

10:18pm: EMS arrives at her home and you are disconnected
Now imagine this is the 50th call this evening for the same disease: COVID19
Objectives

1. Identify the challenges in caring for patients with COVID
2. Understand the model of care for patients with COVID at home
3. Acknowledge the need of Post-COVID Care in the Primary Care setting
4. Discuss the lessons learned by Primary Care in caring for patients with COVID
COVID Impact
Surge from March – June 2020

Visits Since 3/1/20

Emergency Operations Center
In-House COVID Positive Patients

Northwell Health System

Average (3/16 - 6/30) = 1306

Data as of
6/30/2020 8 AM

Select Measure
In-House COVID Positive Patien...
COVID-19 Impact
Volume of patients

372,656
Patients evaluated for COVID, across Northwell

85,967
Patients with COVID infection at Northwell

16,063
Hospitalized patients with COVID

44,004
Outpatients with COVID (managed by Primary Care, Geriatrics, Pulmonary)

As of 9/10/2020
COVID-19 Impact

**Volume of patients**

**Inpatient Volume**

Visits Since 3/1/20

**Outpatient Volume**

Visits Since 3/1/20

@Sagar_Ankit
What does Outpatient management of 44,000 patients mean?

44,000 patients = 60,000 visits
Over 90-100,000 calls

This is in addition to non-COVID acute & chronic care visits for management of other illnesses, including: DM II, HTN, CAD, COPD, Insomnia, Anxiety, Depression, CHF, CKD, Advanced Care Planning and more.
COVID-19 Impact

Patients are on a spectrum of disease for COVID-19

- Patient is known to NHPP via Primary Care (PC)
- Patient is not known to NHPP Primary Care
What does it take to manage a patient at home?
Challenges in caring for COVID patients
COVID-19 Era

Challenges

- No blue-print
- Rapidly evolving data and understanding
- Initial focus on hospitals and facilities
- Patients with non-COVID diseases – acute and chronic
- Infodemic
Managing the COVID-19 infodemic: Promoting healthy behaviours and mitigating the harm from misinformation and disinformation

Joint statement by WHO, UN, UNICEF, UNDP, UNESCO, UNAIDS, ITU, UN Global Pulse, and IFRC

23 September 2020 | Statement
COVID Care at Home
COVID-19 at Home

Protocol: Triage and Management

Guiding principles

1. Provide care at the **right time**
2. Provide care in the **right setting** based on patient’s preference
3. Manage a **spectrum of symptoms** in an objective manner
4. Keep patients with **mild & moderate disease** out of ED/Hospitals
5. Escalate care setting for **severe disease** to ED/Hospitals
COVID-19 at Home
Protocol: Triage and Management

Practical Tips for Ambulatory Care in COVID-19: Lessons Learned in a New York Health System

Ankita Sagar, MD, MPH¹, JoAnne Gotttridge, MD¹, and Nancy LaVine, MD¹
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**Dyspnea Evaluation:**

*Use clinical judgement - assess ability to speak, audible wheeze, etc.*

**Mild:** Not limiting patient, no symptoms at rest

**Moderate:** Some restriction on daily activities

**Severe:** Prevents pt from performing daily activities and/or taking care of self

**Dyspnea Screening Questions:**

- Are you so breathless that you are unable to speak more than a few words?
- Are you breathing harder or faster than usual when doing nothing at all?
- Are you so ill that you've stopped doing all of your usual daily activities?
- Is your breathing faster, slower or the same as normal?

**What could you do yesterday that you can't do today?**

**What makes you breathless now that didn't make you breathless yesterday?**

**Patient Calls:**

- Fever, cough, chills, myalgias, fatigue, nausea, diarrhea, anosmia, or dysgeusia

**Dyspnea**

**NO**

**YES**

**Patient has comorbidities**?

**NO**

**YES**

**Age greater than 60?**

**NO**

**YES**

**Patient advised to contact office if symptoms progress**

**Schedule Teleservices visit in 24 hours.**

**Careful attention at Day 5-8 given risk of decompensation**

**Mild**

**Patient has comorbidities**?

**YES**

**NO**

**Age greater than 60?**

**YES**

**Home Care Referral**

**Severe**

**Moderate**

**ED Referral**

**Schedule in person Office visit in 24 hours or Urgent Care or ED evaluation**

**- Home Care Referral**

**- CROWN Referral**

**Schedule Teleservices visit in 24 hours.**

**Careful attention at Day 5-8 given risk of decompensation**

**Comorbidities to consider:**

- HTN, CAO, DM
- Lung Disease (COPD, Asthma, OSA)
- Kidney/Liver Disease
- Malignancy, Pregnancy, Tobacco Use, Obesity
- Immunosuppressed (oncology, transplant, immunosuppressive meds, HIV,plasmaemia, hemoglobinopathies, etc.)
- Age >60, Male gender
- Social Determinants of Health

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**Medical Quality**

American Journal of Medical Quality

Patient has comorbidities^?  

Age greater than 60?

YES  NO

Schedule Teleservices visit in 24 hours.

Home Care Referral

Careful attention at Day 5-8 given risk of decompensation

Schedule in person Office visit in 24 hours or Urgent Care or ED evaluation

- Home Care Referral  
- CROWN Referral

Moderate  

Severe  

ED Referral

^ Greenhalgh T., Koh GCH, Car J. Covid-19: a remote assessment in
COVID-19 at Home
Building Partnerships

Guiding principles

1. Leverage established partnerships
   - Home care services
   - Pulmonary consultants
   - Hospice care
   - Lab services

2. Create new partnerships rapidly
   - CROWN Program
   - Oxygen supply at home
   - Physical, Occupational, Behavioral Therapy at home
COVID-19 at Home
Northwell at Home

5,000 average daily census

4,666 hospital beds

On average more patients each day than there are hospital beds in Northwell Health Hospital facilities

Available across the NYC & boroughs, Long Island and the Hudson Valley

Director: Irina Mitzner

Services available:
- Telehealth RN
- Case Management
- Lab draws at home
- Oxygen Supply setup
- Pulse oximeter drop off w. virtual RN visit
COVID-19 at Home
Coronavirus Related Outpatient Work Navigators (CROWN) Program

A Covid-19 Lesson: Some Seriously Ill Patients Can Be Treated at Home

To ease pressure on hospitals, Northwell Health brought medical workers, oxygen tanks and intravenous equipment into patients’ homes. Now Florida is taking cues.

When Joan Murray of Westbury, N.Y., a retired registered nurse, came down with Covid-19, she insisted on fighting the illness at home. “The last place I wanted to be was the hospital,” she said. Johnny Milano for The New York Times

CROWN Physician
TeleHealth Visit
Task Note to Referring Physician

Labs
COVID Swab, "Bundle" CBC, CMP, DDIMER, CRP, Ferritin, Procal, IgG
Repeat per physician’s discretion

Homecare
Includes Oxygen and Pulse oximetry
IV Fluids , RN Follow Up and Physician Communication

Medications
If starting on O2, dexamethasone 6mg daily x 10 days
Xarelto - 10mg qd for 30 days. For D-Dimer >900, consider >600.

Radiology
Physician’s Discretion

Goals of Care
Identify HCP, Establish and Document GOC
Hospice Referral If Appropriate

Patient / Caregiver Instruction
Monitor Pulse Oximetry QID and if short of breath
Report changes of >4%
Call EMS if severe shortness of breath or can not maintain O2 sat>88%
Unless not consistent with GOC
She is a 40-year-old mom of two. She is married to her college sweetheart. She is a marathon runner - ran Boston and NYC marathon last year. She lives in Brooklyn. She is a security officer in a public high school. She does not smoke, has no past medical history.

**Hospital course:**
- Admitted with requirement of non-mechanical ventilation; started on high dose steroids;
- Complicated by atrial thrombus and DVT in lower extremity – on anticoagulation at home

**Since discharge:**
- Persistent symptoms: fatigue and muscle atrophy - able to mobilize but needs multiple breaks in her day;
- Activity level: Unable to return to work full-time due to fatigue
- SDOH: financial hardship due to lack of return to full-time work
What now?
What do we do for her?
Post-COVID Care in the Primary Care Setting
COVID Ambulatory Resource Support (CARES) Program

What is CARES Program?

The COVID Ambulatory Resource Support (CARES) Program aims to approach COVID-19 care as a collaboration between Primary Care, Medical/Surgical/Behavioral Specialties, Nurse Navigators, and Care Managers.
CARES Program

Who are the patients in need?

Patients with **acute or new symptoms**, suspicious of or confirmed COVID-19

Patients with **post-acute COVID-19** sequelae or complications
COVID Ambulatory Resource Support (CARES) Program

Why create a program like CARES?

- COVID-19 infection has a range of presenting symptoms and severity
- Journey through recovery is varied
- Evolution of acute symptoms into post-acute syndrome
- Ongoing research on long term sequelae of COVID-19 infection
- Continued learning & development of clinical expertise for care of patients with COVID-19
1 in 3 reported not returning to usual health 14 - 21 days after testing

1 in 5 young adults aged 18–34 years with no chronic medical conditions reported returning to their usual state of health 14 - 21 days after testing

Source: https://jamanetwork.com/journals/jama/fullarticle/2768351
CARES Program

Who are the specialties part of CARES?

- Radiology
- Cardiology
- Gastroenterology
- Pulmonology
- Nephrology
- Infectious Diseases
- Neuropsychiatry
- Physical Medicine & Rehabilitation
- Otolaryngology (ENT)
- Geriatrics
- Infectious Diseases
- Nephrology
- Neuropsychiatry
- OB/GYN
- Otolaryngology (ENT)
- Palliative Medicine
- Pediatric Specialties
- Physical Medicine & Rehabilitation
- Community Care Management
- Northwell at Home
CARES Program
Learning Collaborative

- **Foster collaboration** with members of the CARES program, including various specialists, primary care physicians, geriatricians, pediatricians, physical/occupational therapists, home care clinicians, community care managers, and nurse navigators
- **Promote timely access to care** for patients within the CARES program
- **Leverage Telehealth services**, where applicable, to promote timely access to care
- **Build further upon understanding** of the COVID-19 disease and sequelae
From Challenges to Lessons Learned
COVID-19 Era

Continued Challenges

- No blue-print
- Rapidly evolving data and understanding
- Initial focus on hospitals and facilities
- Patients with non-COVID diseases – acute and chronic
- Infodemic
- Evolving data on post-COVID sequelae and complications
- Patients lost to follow up
- Gaps in care for preventive measures (cancer screenings, vaccinations, and more)
COVID-19 Era
Continued challenges and Barriers

- Recovery for clinicians and front-line workers:
  - Physical & Behavioral

#primarycare = saving souls from eternal guilt in era of #COVID19 😊

Maslow’s Hierarchy of Needs: https://www.simplypsychology.org/maslow.html
COVID-19 Impact
Lessons Learned

Inpatient Volume
Visits Since 3/1/20

16,063
Hospitalized patients with COVID

Outpatient Volume
Visits Since 3/1/20

44,004
Outpatients with COVID and counting...

As of 9/26/2020
COVID-19 Era

*Lessons Learned*

1. Early, consistent **communication** at **all** levels – staff, leadership, and across partners
2. Address the **recovery of front-line** clinicians & staff – physical, mental, emotional
3. Quickly and efficiently **update protocols**
4. Leverage **technology and telehealth** (wearable devices, remote monitoring)
5. Expand capacity to **provide care in home** (especially expanding home-based diagnostics & supplies)
6. Patients will forego healthcare – we need to **address care gaps** now
7. Be **flexible**, lean-in
8. Be **kind** to yourself and your team
9. Be **united** – we need to speak in **one** voice for our patients, peers, and communities
Acknowledgements

Dr. Thomas McGinn
Dr. JoAnne Gottridge
Dr. Nancy LaVine
Dr. Gita Lisker
Dr. Maria Carney
Dr. Chris Hollweg
Dr. Zenobia Brown
Irina Mitzner
Karen Abrashkin
Dr. Barry Goetz
Dr. Michael Oppenheim
Dr. Mary Curtis
Dr. Abraham Saraya
Dr. Vishnoo Kothapeta

....and more!