



Development and Impact of a Virtual PSA Monitoring Clinic for Follow-up of Prostate Cancer Patients

Richard Boyajian, APRN, NP & Ashleigh Kowtoniuk PA-C

Dana-Farber/Brigham and Women's Cancer Center

Disclosure

- Employer: Brigham and Women's Hospital
- Funding: Brigham Care Redesign Incubator & Startup Program (BCRISP) grant
- Financial benefit: Potential royalties from VPCC DHP commercialization

- Author List:

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Background

2021 estimated 248,530 will be diagnosed ¹



15 yr relative Survival rate is 95% ²

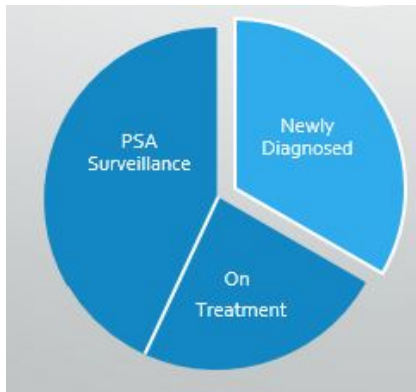
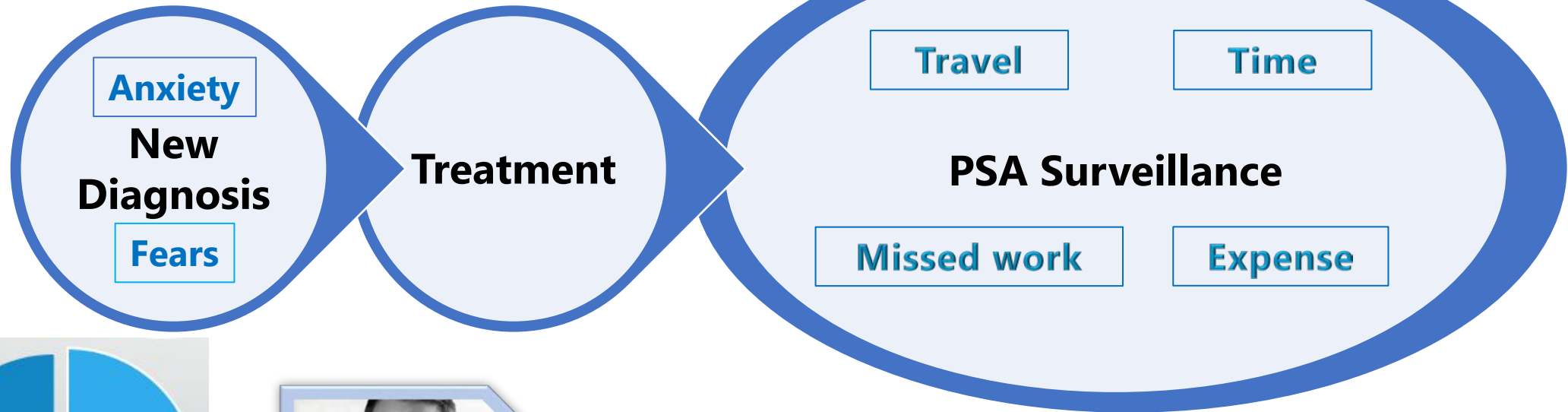
2021 estimated > 3,100,000 living with ¹

Prostate Cancer

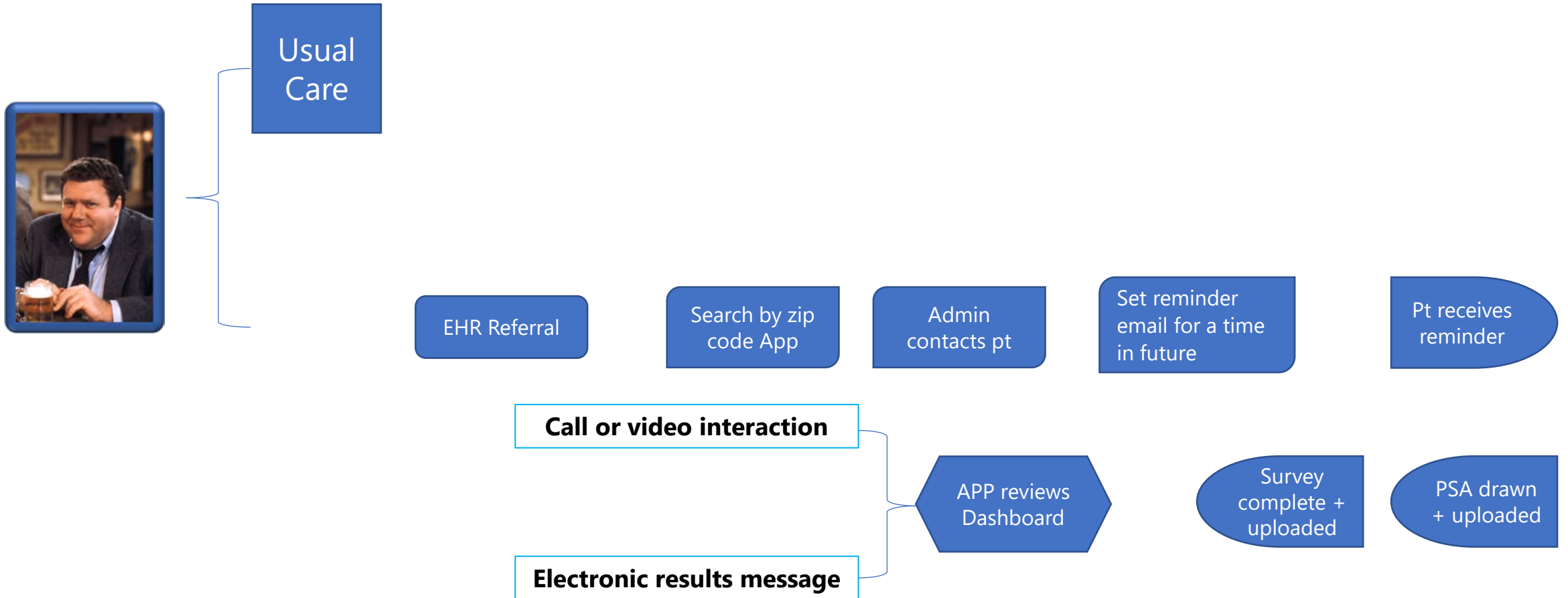
1. American Cancer Society, Cancer Facts & Figures 2021

2. <https://www.hopkinsmedicine.org/health/conditions-and-diseases/prostate-cancer/prostate-cancer-prognos>

Background



Virtual Prostate Cancer Clinic (VPCC)



VPCC Digital Health Platform was designed based on evidence-based standards of care

VPCC Labs

https://batchgeo.com/map/30ff75e4d6f77d18c3a45e59566a9ed3

VPCC Labs

03053

03053 Zip

North Shore Physician Group
1 Widger Rd Marblehead MA 01945
10.03 miles away

Salem Hospital- Lab & Vascular Services Building (Mon-Sat)
57 Highland Avenue Salem MA 01970
10.22 miles away

North Shore Physician Group
2 Essex Center Drive Peabody MA 01960
11.25 miles away

MGH-NSMC for Outpatient Care-Suite LL01
104 Endicott St Danvers MA 01923
12.23 miles away

MGH/NSMC for Outpatient Care
104 Endicott St Danvers MA 01923
12.23 miles away

NSMC Outpatient Services
1 Hutchinson Dr Danvers MA 01923
12.46 miles away

NWH Walk-in Service
9 Hope Ave Waltham MA 02453
13.56 miles away

Newton-Wellesley Hospital (Mon-Fri + Sat-Sun)
2014 Washington St Newton MA 02462
13.76 miles away

DF/BWHCC at South Shore Hospital
101 Columbian Street South Weymouth MA 02190
13.81 miles away

NW Patient Service Center (Mon-Fri-closed 1:00-1:30PM)-First Floor

Map Satellite

Keyboard shortcuts | Map data ©2021 Google | 20 mi | Terms of Use

Contact map owner

MGB Affiliate

a. BWH b. MGH c. NSMC d. DF e. NWH f. CDH Others

5:21 PM 10/19/2021

Hello, Mr. -----,

Our records show that you are due for a repeat PSA in October 2021. After receiving treatment for prostate cancer, your PSA needs to be monitored on a regular basis. This is done to ensure that your prostate cancer has not returned.

Step 1 - Visit a lab for your PSA blood work

The lab you had chosen during enrollment is:
BWH/MGH Health Care Center at Foxborough
20 Patriot Place Foxborough, MA 02035

An electronic lab order has been entered for you. Lab results from this facility are automatically linked to our medical record system. Our VPCC team will have access to the lab results when they are ready.

If the lab listed above is no longer your preferred lab, you're welcome to visit any Mass General Brigham lab, and the electronic lab order will still work. If you need to visit a lab outside the Mass General Brigham network, let us know, so we can send you a new lab order.

Step 2 - Update us about your symptoms

Tell us about your symptoms by filling out the survey here:

[Symptom Survey](#)

Please complete the survey to help us better understand any symptoms you may be experiencing.

Step 3 - Review your results

When we have the results of your PSA and symptom survey, we will contact you to review the information.

Please contact our office directly with any questions or concerns.

Thank you,
Virtual Prostate Cancer Clinic (VPCC)

Phone: 617-525-8431
Fax: 617-394-2692
Email: VPSAM@partners.org

October 26, 2021

Hello -----,

We hope you are well. It has been 36 months since you completed your radiation therapy.

Your most recent PSA continues to show no sign of cancer. If your PSA stays below 2.0, we would not be concerned about any cancer recurrence.

PSA RESULT in the EHR IS PULLED INTO MESSAGE

If you would like to speak with a clinician about your PSA or radiation-related symptoms (particularly any blood in your stool or urine), please call our office or schedule an appointment online using patient gateway.

To schedule your appointment online, log in to your Patient Gateway account [here](#) and select 'Schedule an Appointment' under the menu button. Simply follow the prompts to find a date and time that is convenient for you. If you have not had an appointment with Richard Boyajian NP and Ashleigh Kowtoniuk PA-C in the past, you will not be able to self-schedule this appointment. If this is the case, please call our office to schedule.

After completing treatment, we must continue to regularly check your PSA levels (Prostate-Specific Antigen). We do this to ensure your prostate cancer has not returned. It is also important to monitor for any radiation-related symptoms. Your current symptom survey indicates that you are not experiencing any significant symptoms.

Your next check-in is due in April 2022. We have placed an order in the system so you can go to your MGB lab. We will send you a reminder email for your next check-in prompting you to get your next PSA.

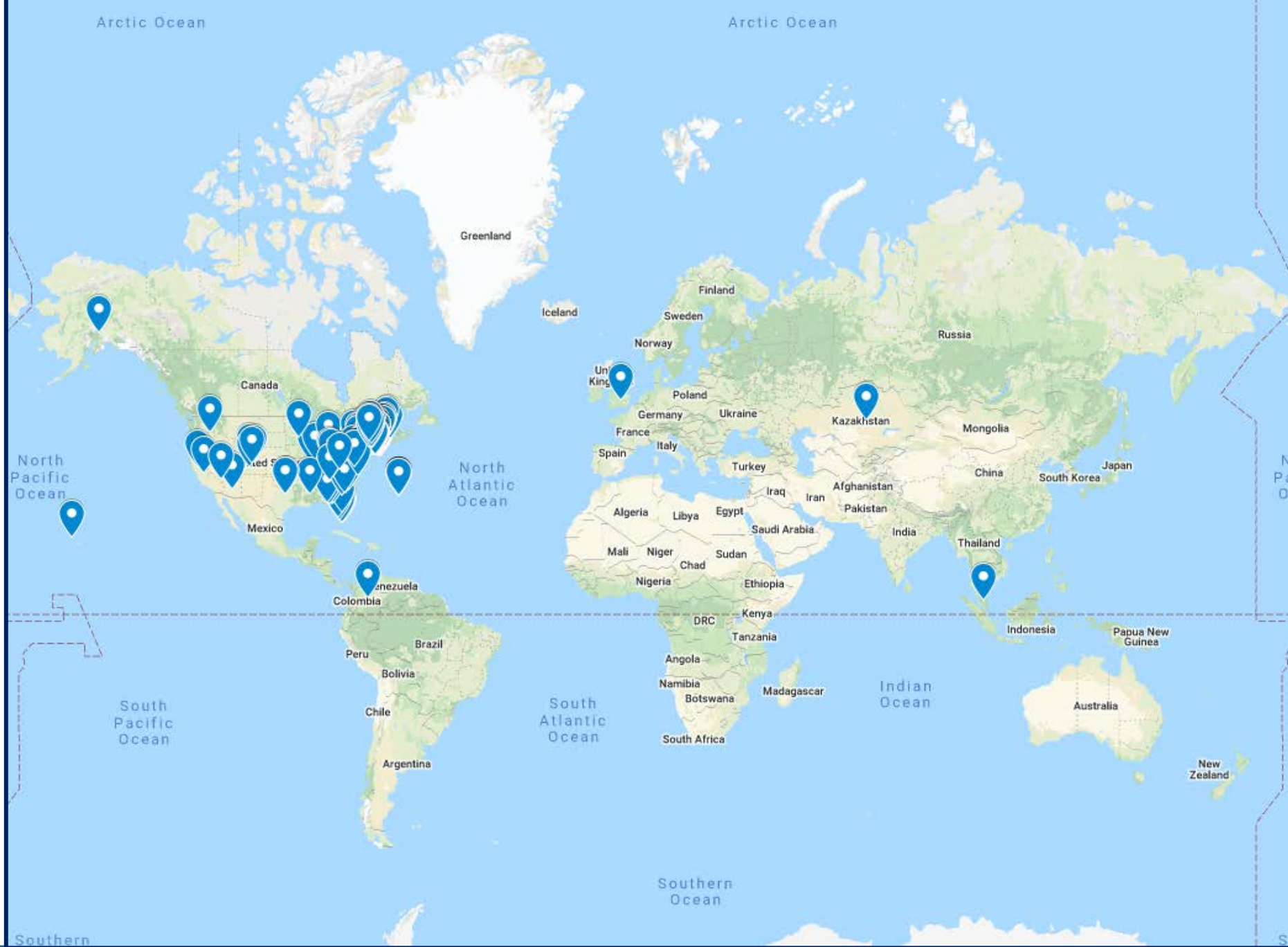
If you have any questions or concerns please call our office at (617) 525-8431.

Thank you,

Richard N. Boyajian, NP
Virtual Prostate Cancer Clinic
Brigham & Women's Hospital
Department of Radiation Oncology
Office: 617-525-8431
Fax: 617-394-2692

Virtual Care Misconceptions

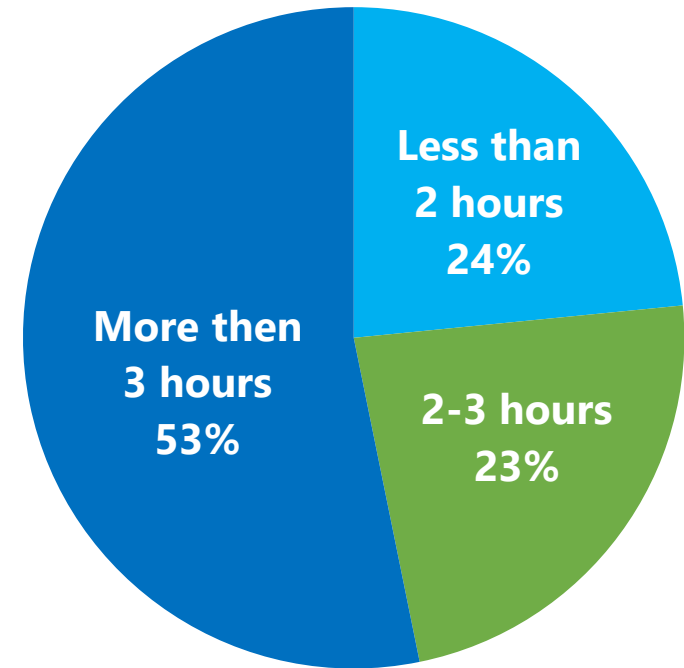
- Too many in healthcare fall victim to maintaining a **one : one** relationship between in person & virtual visits.
- Transfer 1 in person visit to 1 virtual visit.
- Not a long-term solution to the healthcare provider shortage
- Healthcare needs to understand the benefit of the **One : Many** relationship
- Score patients on **urgency of need**
- **Higher needs** require a provider visit
- **Lower needs** first contact is electronic to report their “normal” results.
- This approach allows a small number of provider to manage a larger patient population, while still ensuring the entire population receives the care they need



Patient Impact

1,505 surveys completed by 636 unique pts, ~45% response rate.

- **Access:** Compared to Pre-VPCC (FY15)...
 - By FY2019, consults had more than doubled, **109.74%** because the doctors had more time
 - By FY2019, we have treated **79.3%** more pts with prostate cancer
- **Convenience:** 92% of patients saved time overall



Amount of Time Saved
N=1,408

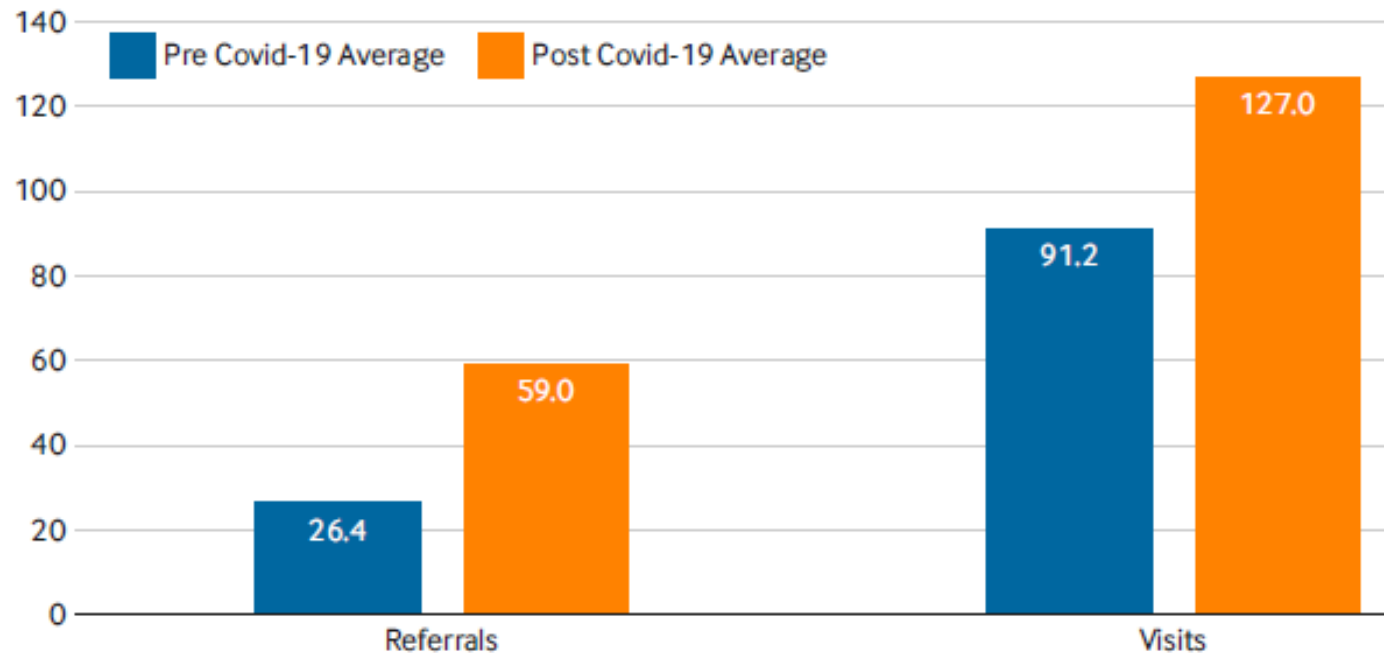
- **Patient Impact** 1,505 surveys completed by 636 unique pts, ~45% response rate.

- **Satisfaction:** 94% of patients were comfortable with this form of monitoring
- **Stay Connected:** 95.1% reported, it was important to have **DF/BWCC team** monitoring as opposed to outside providers
- **Financial savings:** 87.3% reported reduced out-of-pocket expenses
- >90% reported that VPCC made their health care
 - **easier and more flexible & convenient**
 - **met their medical needs**
 - **reduced travel-related stress**
 - **receive PSA results in a timely manner, and**
 - **pts were comfortable with this form of monitoring**

Patient Impact

1,505 surveys completed by 636 unique pts, ~45% response rate.

Access: The number of virtual follow up increased steadily each year, with a spike in FY2019 due to COVID-19



During the pandemic, the VPCC allowed for very rapid switching of patients from in-person follow-ups to virtual monitoring