



Quality improvement, outreach and advocacy in pancreaticobiliary cancer

Knight Cancer Network Symposium 3/12/2021

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Physician-in-Chief, Knight Cancer Institute

Important Elements of Treating PDAC

- 1) Timely referral and appointments
 - Median time from referral to consultation 5 days (range 0-28)
- 2) Multidisciplinary management (ie tumor board)
 - Held weekly on Tue evening
 - Surgery, Med/Rad Onc, Pathology, Radiology, Trainees, Nurses
- 3) Check lists/templates
 - Pancreas-protocol CT staging template (not older than 6 wks)
 - Selective EUS with stent/biopsy (within 48-72 hrs)
 - Re-review of outside path reports
- 4) Genetic counseling, nutrition support for all patients

Important Elements of Treating PDAC

- 4) Consider neoadjuvant therapy for:
 - High risk resectable (high CA 19-9, large tumor, concurrent illness)
 - Borderline
 - Locally advanced disease

- 5) Aggressive pancreatectomy with vascular resection (if warranted)

- 6) Minimize morbidity and enhance recovery

- 7) Novel therapeutics evaluated thru clinical trials

- 8) Palliative care and psychosocial support

Pancreas CT Staging template

- **Location of Tumor (where majority of tumor is located).**
 - Uncinate – parenchyma posterior to SMV/PV
 - Head – parenchyma between uncinata and neck
 - Neck – parenchyma anterior to the SMV
 - Body – closest 50% of the parenchyma to left (upstream) of neck
 - Tail – furthest 50% of parenchyma to the left (upstream) of the neck
- **Tumor Size (maximum length in transverse, coronal, or sagittal plane)**
- **Vascular Involvement:**
 - Vessels evaluated: SMV, Splenic V & A, Portal, Celiac, SMA, Hepatic Artery
 - Tumor involvement is graded by highest degree of involvement
 - **None** – no evidence of tumor contact.
 - **Abutment** – Tumor contact 1–180° with vessel circumference
 - **Encasement** – Tumor contact 181–360° with vessel circumference
 - **Occlusion** – No contrast enhancement (regardless of degree of tumor contact)
- **Liver Assessment**
 - **Normal**
 - **Benign** – Presence of hepatic lesions that are benign (cysts, hemangiomas, etc) based on their imaging features. High degree of confidence that observation is benign
 - **Indeterminate** – Lesion(s) of uncertain etiology that are of indeterminate probability for metastasis
 - **Suspicious** – Finding that is probable (>50% likelihood) but not definitely metastasis.
 - **Consistent with Metastasis** – radiologist is virtually 100% certain that lesion represents a metastasis. If there is doubt then lesion should be classified as suspicious.
- **Ascites. Presence or absence of ascites should be noted. If there are any findings suspect for peritoneal disease these should be noted.**
- **Lymphadenopathy: (peri-pancreatic, para-aortic, celiac, distant)**
- **Short axis length of 8A lymph node (pre-hepatic artery)**
- **Bowel involvement (duodenum, stomach, jejunum, colon)**

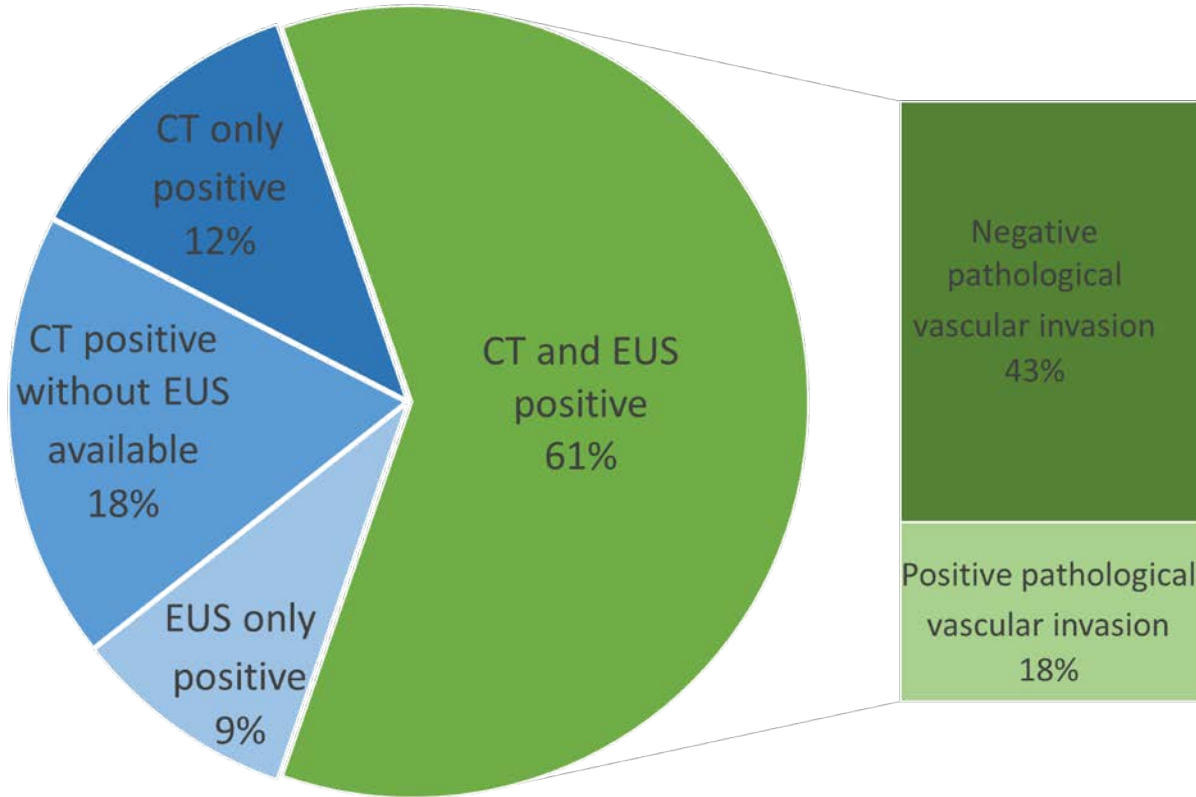
EUS by local experts

- 1) Obtain tissue biopsy with in room path evaluation of specimen (core bx)
- 2) Examine local mesenteric vasculature
 - 1) Portal vein, SMV, Splenic V, IVC
 - 2) Celiac axis, SMA, Aorta
- 3) Staging
 - 1) Liver metastases
 - 2) Peritoneal disease (ascites, carcinomatosis)
 - 3) Celiac, Hepatic artery and aortocaval lymph nodes
- 4) Palliation
 - 1) CBD- Plastic vs metal stent, choledochoduodenostomy
 - 2) GI-duodenal stent vs endoscopic GJ
 - 3) Plexus block

Does mesenteric venous imaging assessment accurately predict pathologic invasion in localized pancreatic ductal adenocarcinoma?

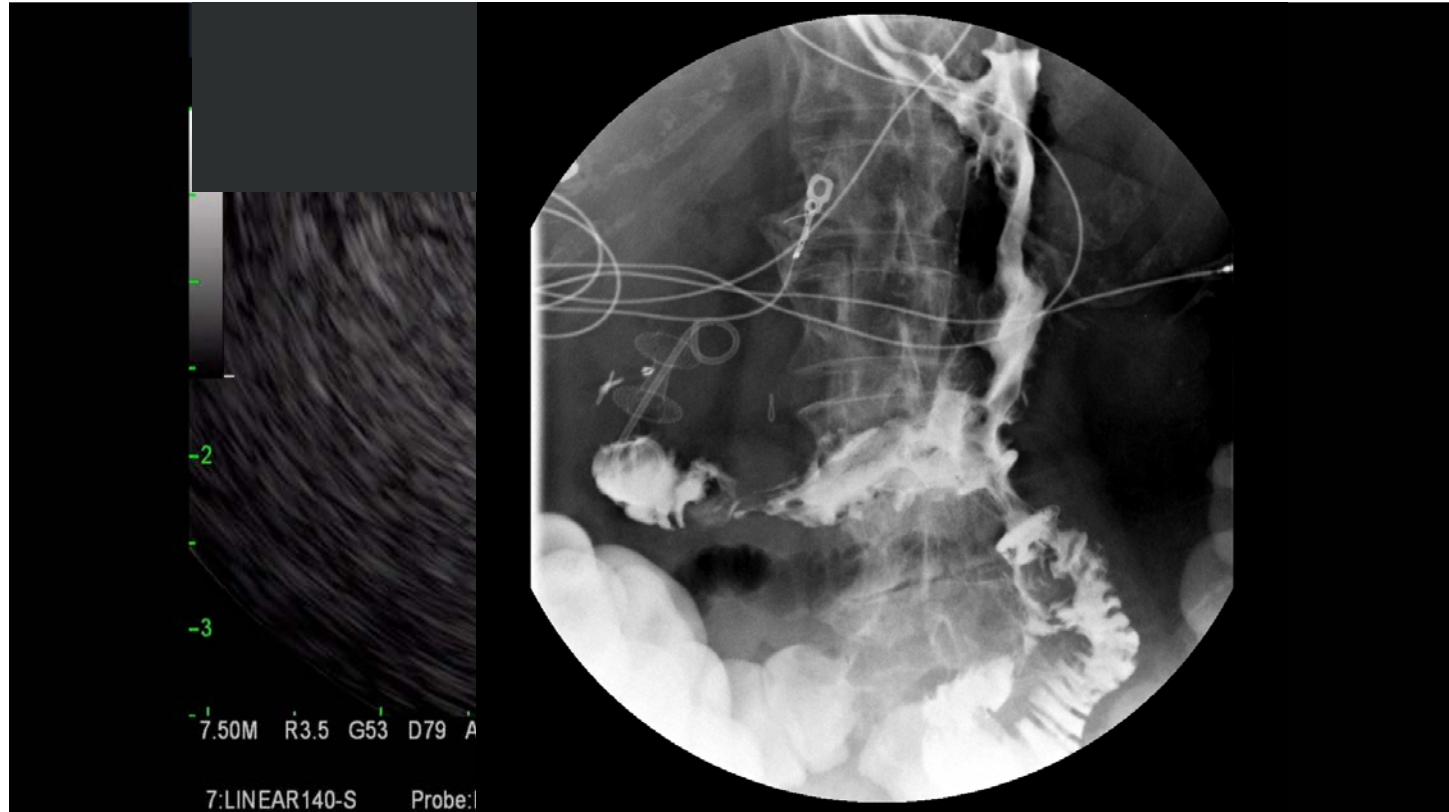
HPB 2018, 20, 925–931

Jesse Clanton¹, Stephen Oh², Stephen J. Kaplan¹, Emily Johnson³, Andrew Ross⁴, Richard Kozarek⁴, Adnan Alseidi¹, Thomas Biehl¹, Vincent J. Picozzi², William S. Helton¹, David Coy³, Russell Dorer⁵ & Flavio G. Rocha¹



1/3 of upfront “resectable” PDAC required mesenteric venous resection

Endoscopic diagnosis, staging and palliation



Virginia Mason Pancreatic Head Mass Multidisciplinary Pathway



KEY

OP = (These labs need to be done @ VM)

Q = (If outside CT is < 4 wks old -> VM had consult for official read using staging template, If > 4 wks old -> CT Panc @ VM. Must state "use Pancreas staging template" in order)
- Note that if outside CT quality does not allow for use of staging template, then radiology will state that in read and a CT panc @ VM is needed

B = (If any of these are available from outside hospital & are < 6 wks old then nothing is needed)

Work up done @ VM or placed into VM electronic record (see Key)
Labs: CBC, CMR, CA19-9, CEA, PT, CRP, Serum vit D3, HgbA1c.
RAI: CT Panc protocol/chest, pelvis ctt

Evidence of Metastatic Disease?

Medical Oncology Consult
 Tissue bx (2⁺ recommended)
 EUS or CT/US guided or laparoscopy

Cystic Mass or Atypical presentation?

- Atypical Presentation:
 - Unclear Dx
 - Benign stricture
 - Autoimmune Pancreatitis
- Mass w/ Cystic Component:

Follow Cystic Mass Pathway
 OR GI consult for WU and EUS/ERCP as indicated

Med Oncology Consult and Surg Consult

Resectability and Higher Risk Factor	Margin Factors & Patient Factors
<input type="checkbox"/> Vascular (arterial) abutment	<input type="checkbox"/> Bulky tumor > 4.5cm tumor with higher risk of R1 resection
<input type="checkbox"/> Portal Venous Distortion	<input type="checkbox"/> Patient factors: high cardiopulmonary risk
<input type="checkbox"/> Vascular encasement or tumor thrombus	<input type="checkbox"/> Concomitant Mod-Severe Pancreatitis
<input type="checkbox"/> CA 19-9 > 37 (unobstructed & @ VM)	

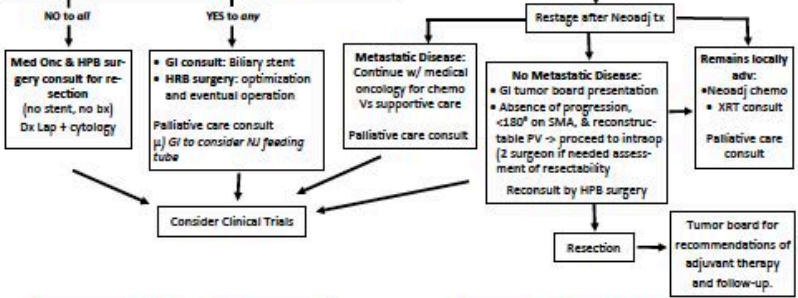
For All Patients	For Patients with Biliary Obst
<input type="checkbox"/> Perf. Status ≥ 2	<input type="checkbox"/> TB ≥ 20 , Get up and Go > 20 sec
<input type="checkbox"/> Needs extensive Cardio-pulm w/u	<input type="checkbox"/> Evidence of symptoms or Cholangitis
<input type="checkbox"/> Alb < 3.0	<input type="checkbox"/> Unable to schedule surgery within ~7 days

Medical Oncology consult for Neoadj Therapy

GI consult:

- EUS for Staging and Bx (if bx neg, repeat EUS) (Bx endoscopically positive nodes if NOT peri-pancreatic)
- short metal biliary stent (if obst present) (ideally within 72hrs of consult)

Surgery consult: Dx Lap w/ washing, Port placement



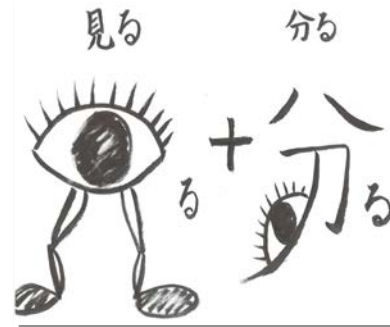
VM Resection Arm

VM Neoadjuvant Arm

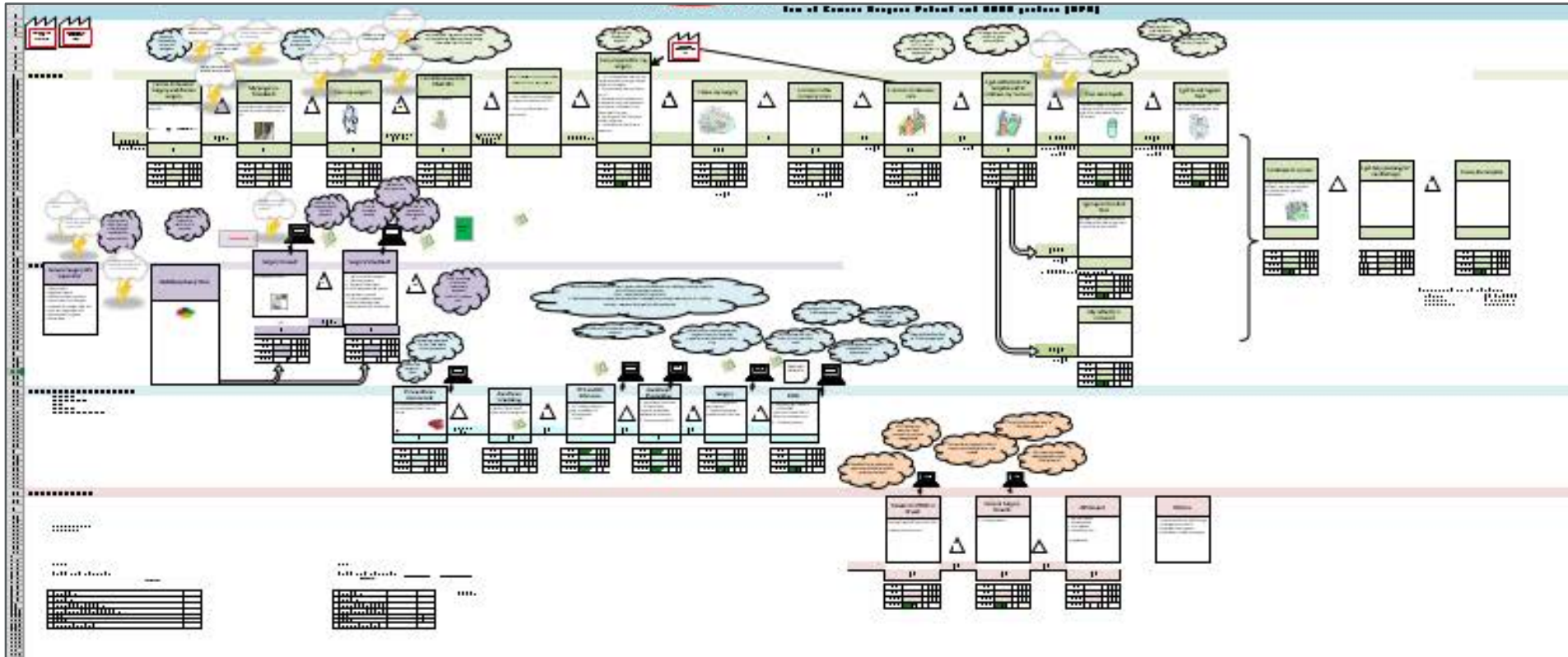
Quality Improvement

The History of TPS and VMPS

- Measure observations
- Mistake proofing
- Automation
- Reduced downtime
- Walk the factory floor (genba)
- Reduced waste (muda)
- Incremental improvement (Kaizen)



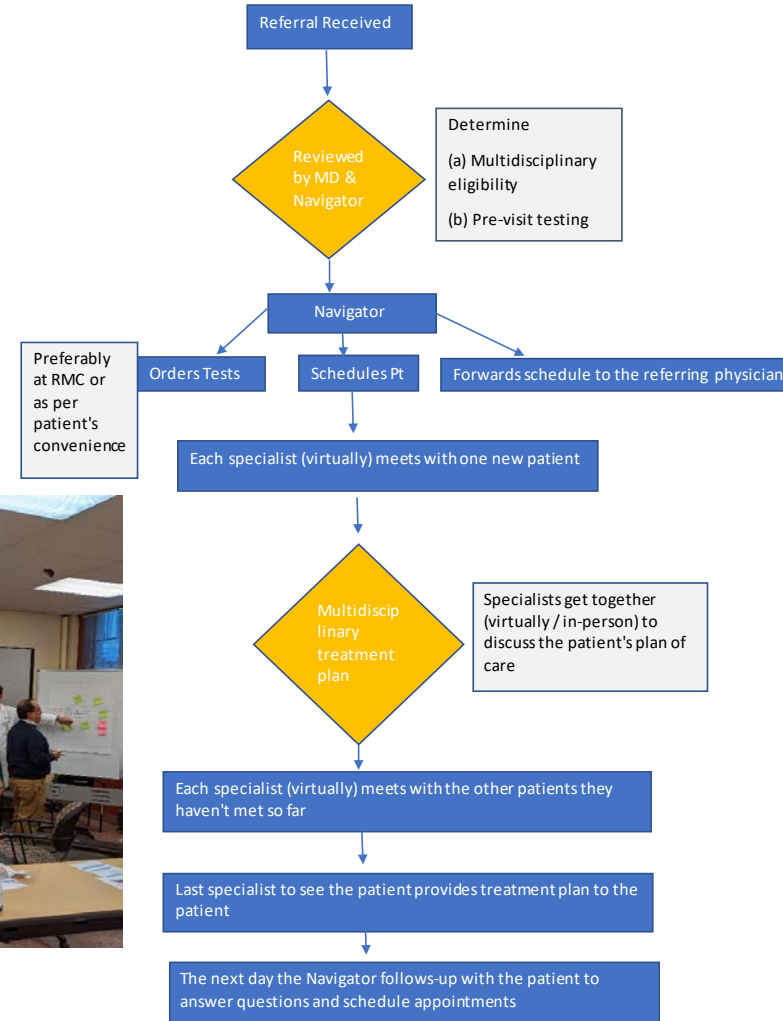
Value Stream Map



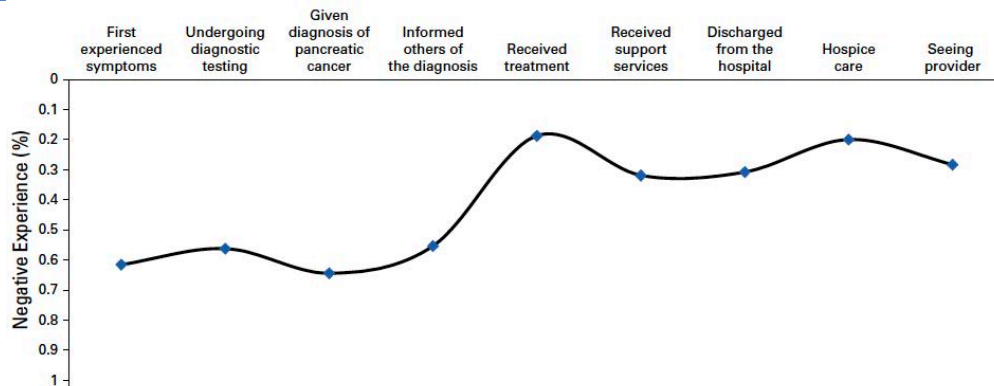
Telehealth Visioning session

<ul style="list-style-type: none"> Intuitive and Reliable platform 	<ul style="list-style-type: none"> HIPPA and Privacy 	<ul style="list-style-type: none"> Flexible provider schedules 	<ul style="list-style-type: none"> Access to multidisciplinary care
<ul style="list-style-type: none"> Payment / Insurance Coverage 	<ul style="list-style-type: none"> Tech support and training for patients 	<ul style="list-style-type: none"> Platform leader 	<ul style="list-style-type: none"> Warm handoffs/ MA to setup

Telehealth Multidisciplinary Pathway – PDSA Model 1



Experience-Based Design for Patients With Pancreatic Cancer



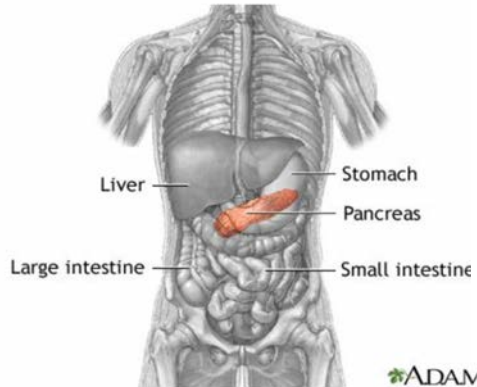
Assumption	Learned	Redesign
With often-fatal disease like pancreatic cancer, outcomes are more important than experience.	The care journey is all important because patient survival may not be long.	Pancreatic care process redesigned around patient and caregiver needs
Long-term outcomes matter most.	Aspects of treatment (e.g., need for postsurgical drain, inability to get out of bed, pain, intolerance of normal diet) profoundly affect the experience of care.	Improved educational resources for patients and caregivers around expectations for the treatment journey enable emotional and physical preparation.
Hope is only about achieving cure.	Hope is critical but has different meanings between individuals, and is often based on meaningful life events rather than survival.	Know Me form to make patients goals and values visible to care team

Patient/Caregiver Education



Understanding Your Pancreas

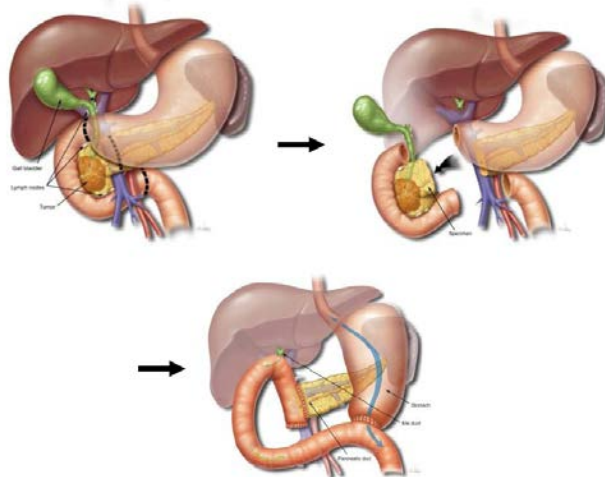
A Patient's Guide to Pancreatic Surgery



ADAM

VIRGINIA MASON MEDICAL CENTER

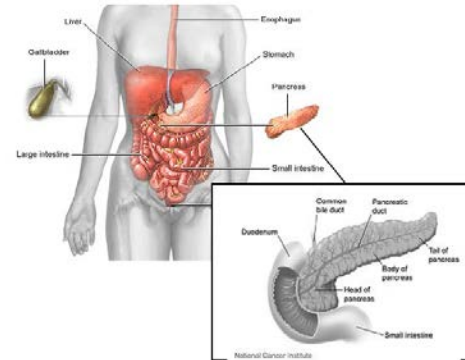
Tumors in the head of the pancreas require removal of the entire head of the pancreas, along with the duodenum, the gallbladder, and part of the bile duct. A complex reconstruction is then undertaken, where your stomach, pancreas, and bile duct are all reconnected to your small intestine.



ABOUT YOUR PANCREAS

The pancreas is an organ located in the back of your abdomen, behind your stomach and underneath your liver. It has three parts: the head, the body and the tail. The head of the pancreas is closest to your right side. The tail is closest to your left side. Important functions of the pancreas include:

- Making enzymes that mix with your food and aid in digestion of proteins, fats, and sugars.
- Making hormones, such as insulin, that enter the bloodstream and regulate your body's metabolism



A. [Digestive System VirginiaMason.org](http://DigestiveSystem.VirginiaMason.org)
B. Illustrator Ron Ross



We want to hear from you!



Dear Patient,

Pancreatic cancer is a difficult disease. Each person deals with their diagnosis differently. Some people desire very detailed information all at once, while others want a little bit of information at a time. No one can ever be fully prepared.

I he attached tool was developed by patients, their families and team members. It is a way to help us understand you as a unique person, and is meant to help you work through needed conversations with yourself, your caregivers, family, friends, providers and care team.

The tool strives to empower you as you deal with this difficult disease. You can decide how to use it: you can complete and share it right now, or you can take it home, talk about it with loved ones, and bring it back next time. Use the back if you need more room. Please don't feel like you need to have all the answers figured out; what you are feeling right now is what is important. The idea is to start the conversation so that we can be realistic with your goals as you know them today.

We want to know you, your values, symptoms, beliefs and preferences. We want to hear about you and what you are feeling, even if you don't think it's important. During the course of your treatment, your goals may change. With your input, we will aim to give you the right information, in the right amount, at the right time.

We understand that this conversation is ongoing, and look forward to updating this information together with you. The information you complete on this form will guide your care and your decision making, and help us honor you and your personal life goals.

Your Virginia Mason Pancreatic Cancer Care Team

“Know Me” Intake Form



What I want you to know about me...

- 1) The best way to reach me is: Email: _____ MyVM
 Home Phone: _____ Cell Phone: _____ Other: _____
- 2) Who matters most to me: _____
- 3) My circle of support includes: _____
- 4) My goals of care are: _____
- 5) My greatest hope is: _____
- 6) My greatest fear is: _____
- 7) Information I will need includes: _____
- 8) My strengths at this time include: _____
- 9) Obstacles to my care at Virginia Mason include: _____
- 10) At this time I prefer to be given: Detailed information General descriptions
- 11) I feel I understand my diagnosis: Completely Very Well Not Sure A Little Not at All
- 12) I feel I understand my prognosis: Completely Very Well Not Sure A Little Not at All
- 13) I feel I understand my treatment plan: Completely Very Well Not Sure A Little Not at All
- 14) In the event you feel unable to make decisions, do you have someone who will speak for you?
Do you have someone designated with Power of Attorney for Medical Decisions? _____
- 15) If possible, please record my care conferences and provide me with a CD/digital format recording: Yes No
- 16) Do you have any big events taking place in your life this coming year? _____
- 17) How do you spend your days? _____
- 18) I would like to be contacted by a member of the Pancreas Cancer community: Yes No
- 19) My faith preference is: _____ N/A I would like a visit from Spiritual Care: Yes No
- 20) Please provide me with information about these support services:

<input type="checkbox"/> Financial	<input type="checkbox"/> Diabetes Management	<input type="checkbox"/> Possible GI impacts – surgery, stents
<input type="checkbox"/> Transportation/Lodging	<input type="checkbox"/> Pain Management	<input type="checkbox"/> Survivorship
<input type="checkbox"/> Internet Resource Materials	<input type="checkbox"/> Psychological Counseling	<input type="checkbox"/> Communication with Family/Friends:
<input type="checkbox"/> Spiritual Support	<input type="checkbox"/> Social Work	<input type="checkbox"/> Caring Bridge, blogs, etc.
<input type="checkbox"/> Palliative Care	<input type="checkbox"/> Possible Treatment Side Effects	<input type="checkbox"/> Recovery Support: #1 for increasing strength, nutrition
<input type="checkbox"/> Hospice	<input type="checkbox"/> Alternative/Complementary	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Nutrition/Meal Planning	<input type="checkbox"/> Medicine (Massage, Acupuncture, etc)	
- 21) Other information you should know about me, preferences, likes/dislikes: _____

— OFFICE USE ONLY —
PATIENT STICKER

If you need room to write in additional information, feel free to use the back of this form.

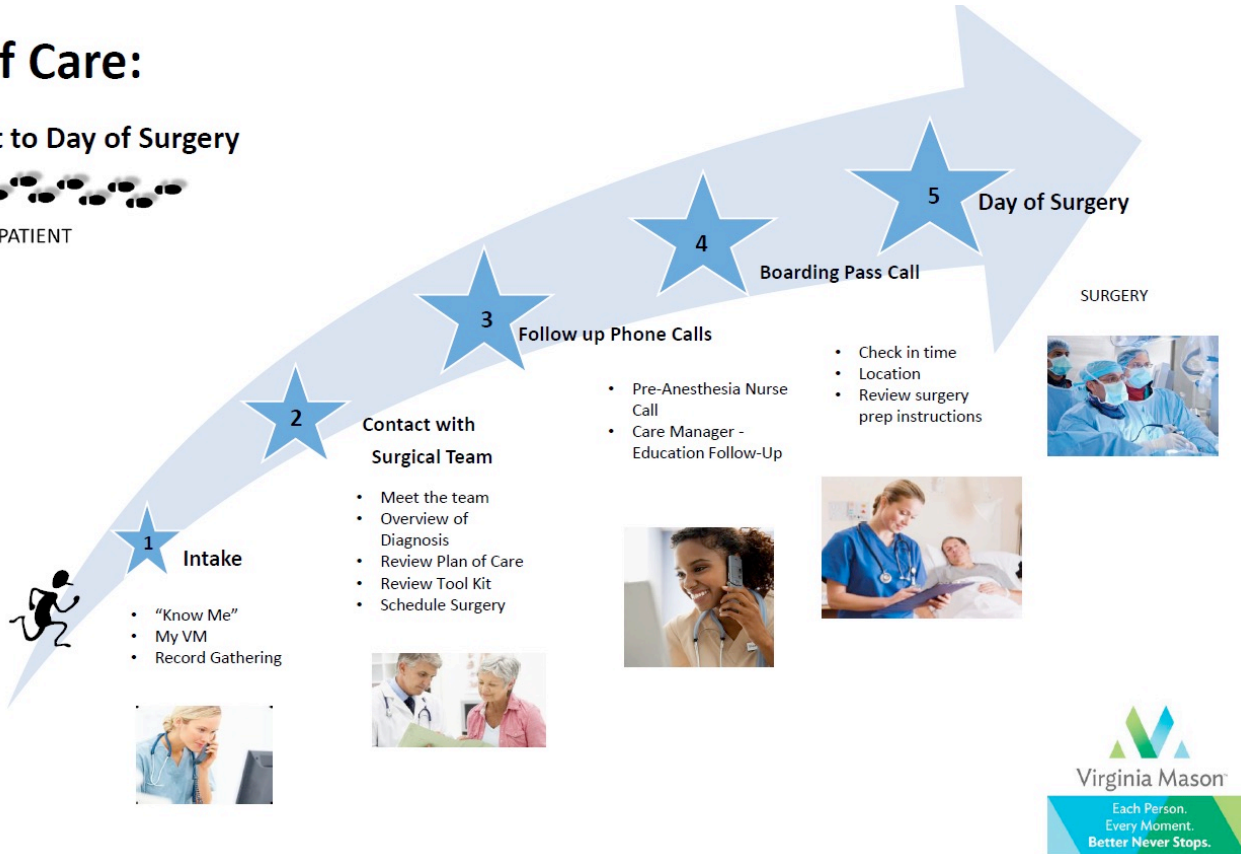
TODAY'S DATE: _____

Plan of Care:

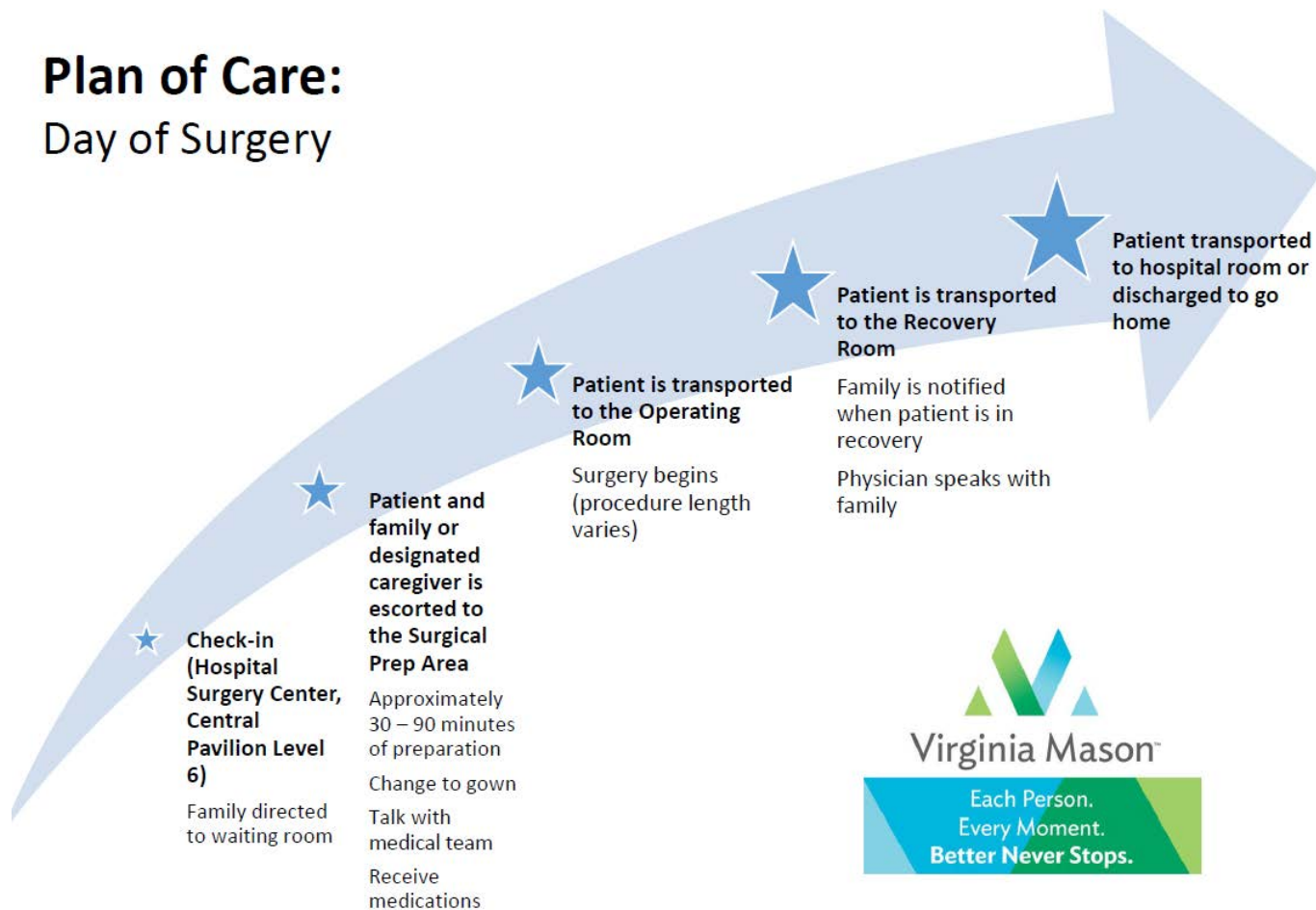
Initial Visit to Day of Surgery



PATH OF THE PATIENT

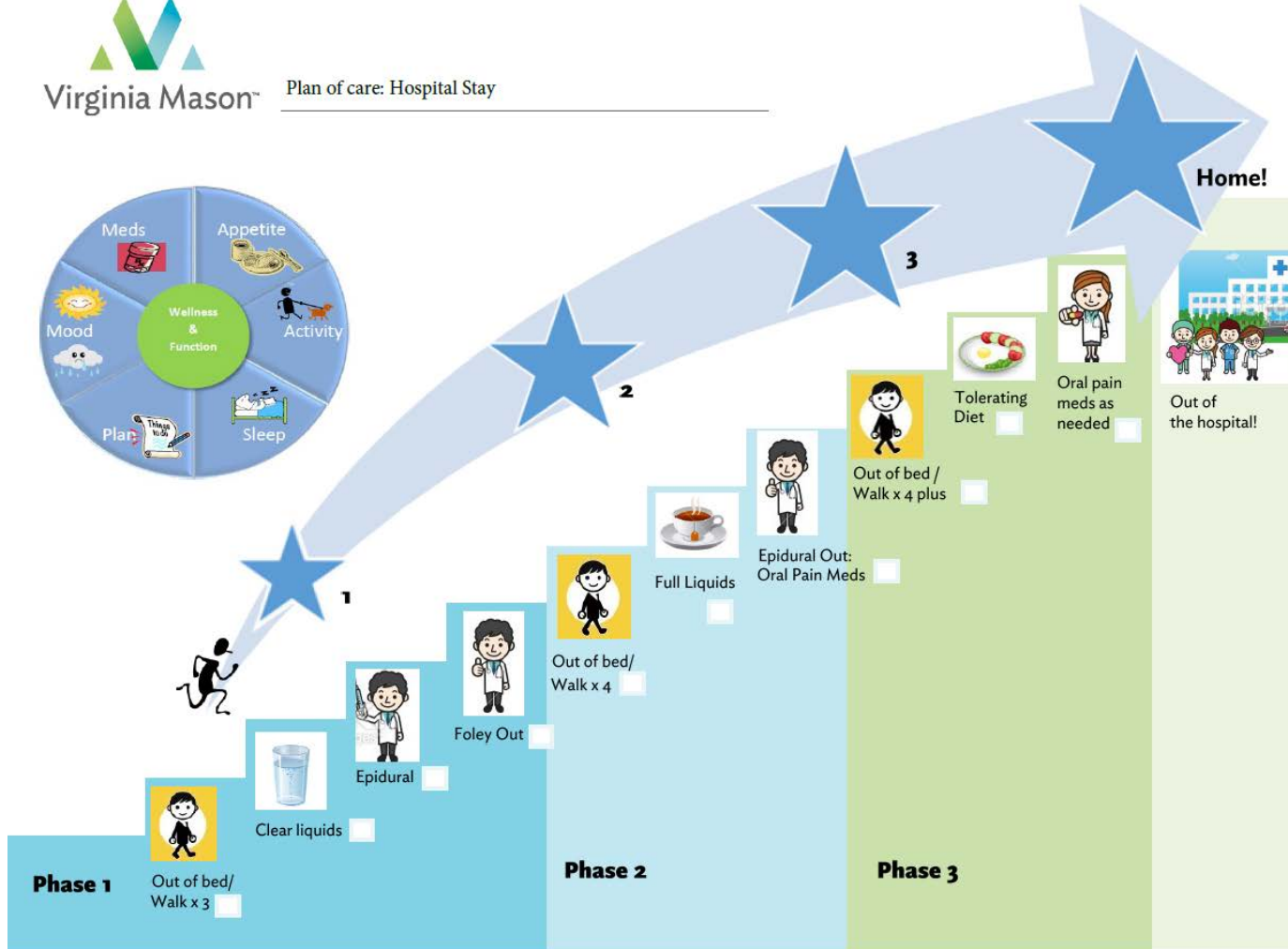


Plan of Care: Day of Surgery

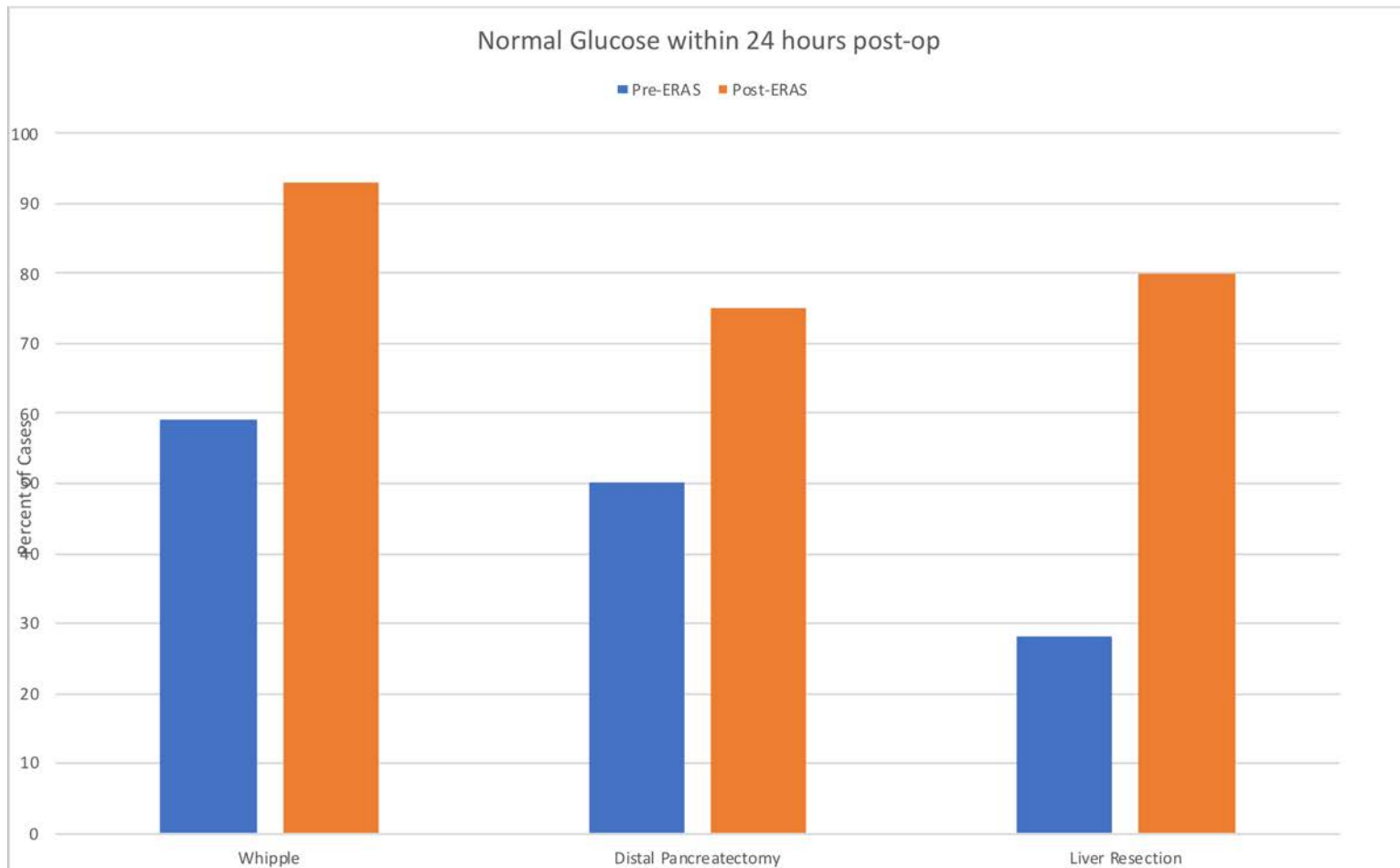


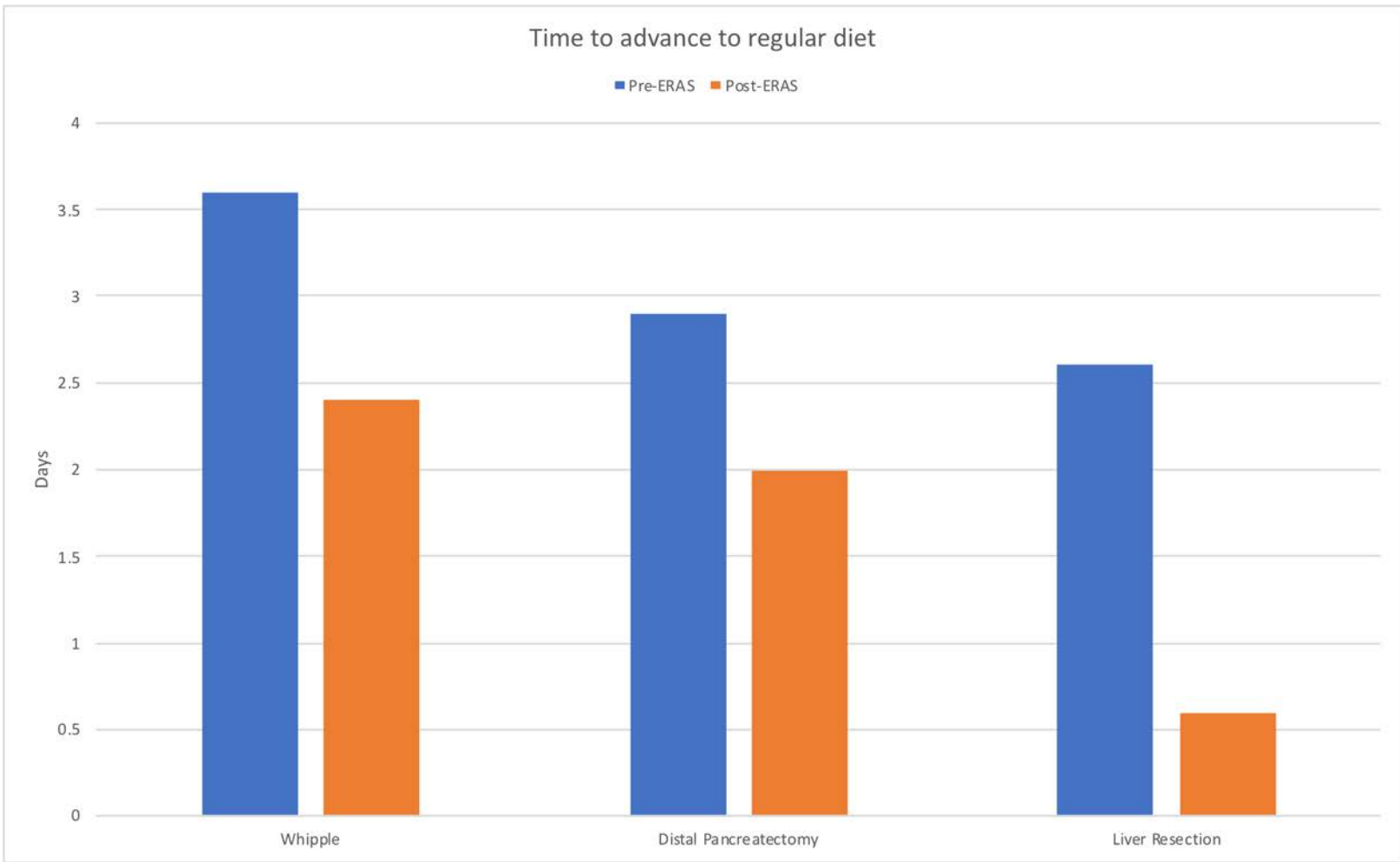
Virginia Mason™

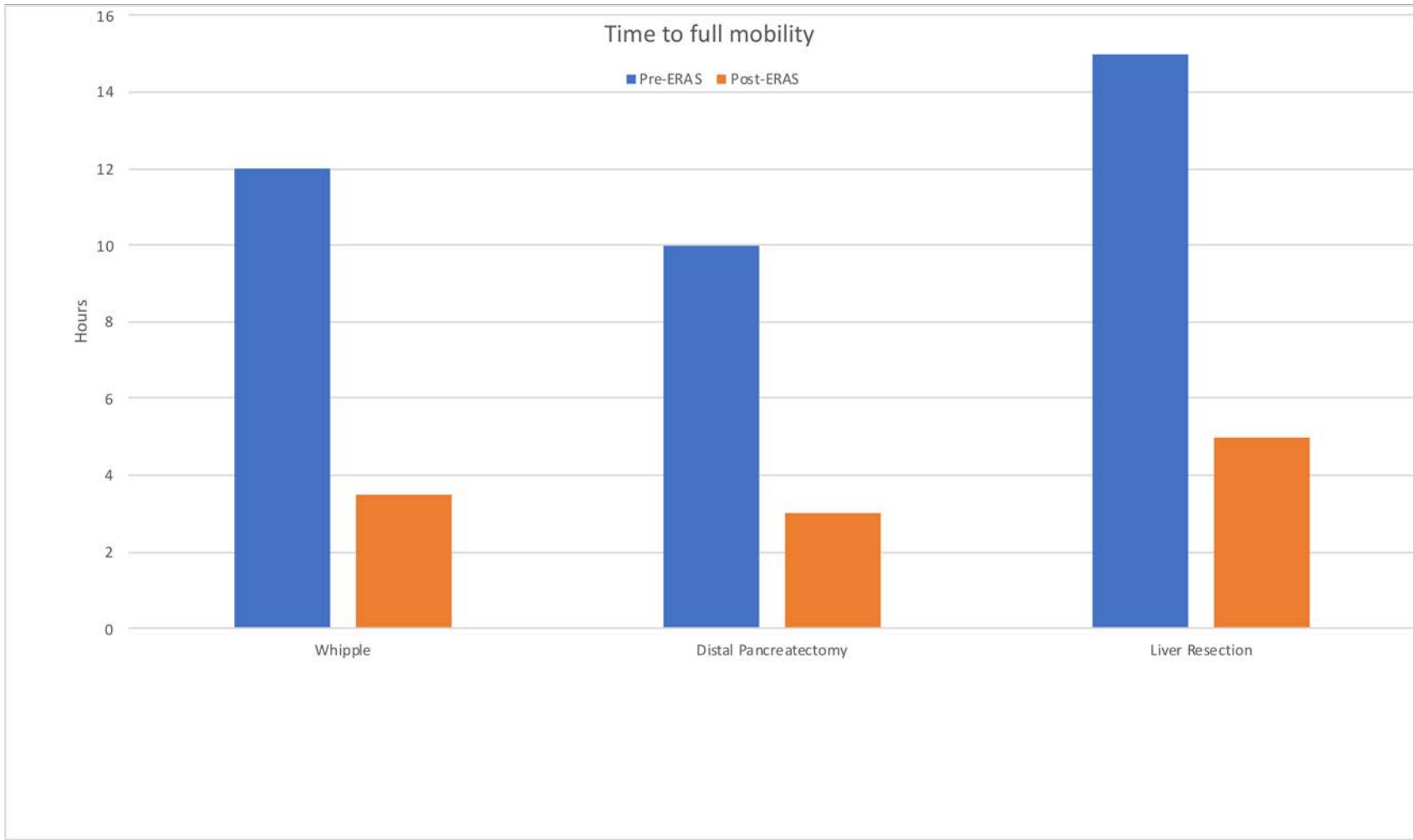
Each Person.
Every Moment.
Better Never Stops.



Patient Name:







Pancreatic Cancer Care at Virginia Mason

Meet our team

Biographies and video interviews of our physicians are available at VirginiaMason.org.

GASTROENTEROLOGY



Shayan
Irani, MD



Richard
Kozarik, MD



Rajesh
Krishnamoorthi,
MD



Michael
Larson, MD



Joanna
Law, MD



Andrew
Ross, MD

MEDICAL ONCOLOGY



Hagen
Kornecke, MD



Bruce
Lin, MD



Vincent
Piccozzi, MD

INTERVENTIONAL RADIOLOGY



Robert
Crane, MD



Mehran
Fotoohi, MD



Patrick
Marcin, MD



Alvin
Acaron, ARNP

PANCREATIC CANCER SURGERY



Thomas
Biehl, MD



Scott
Helton, MD



Flavio
Rocha, MD

PANCREATIC CANCER NUTRITION



Jyoti
Benjamin, RD

SURGERY COORDINATOR



Faye
Lee, RN

RADIATION ONCOLOGY



Huong
Pham, MD



Andrew
Suen, MD



Michelle
Yao, MD

RADIOLOGY



David
Coy, MD, PhD



Paul
Sicuro, MD

PATHOLOGY



Russell
Dorer, MD



Christopher
Gauft, MD

ONCOLOGY SOCIAL WORKERS



Kelly
Christensen,
MSW, LICSW



Stacy
Marini, MSW,
LICSW



Kathryn
Swingle, MSW

PALLIATIVE CARE



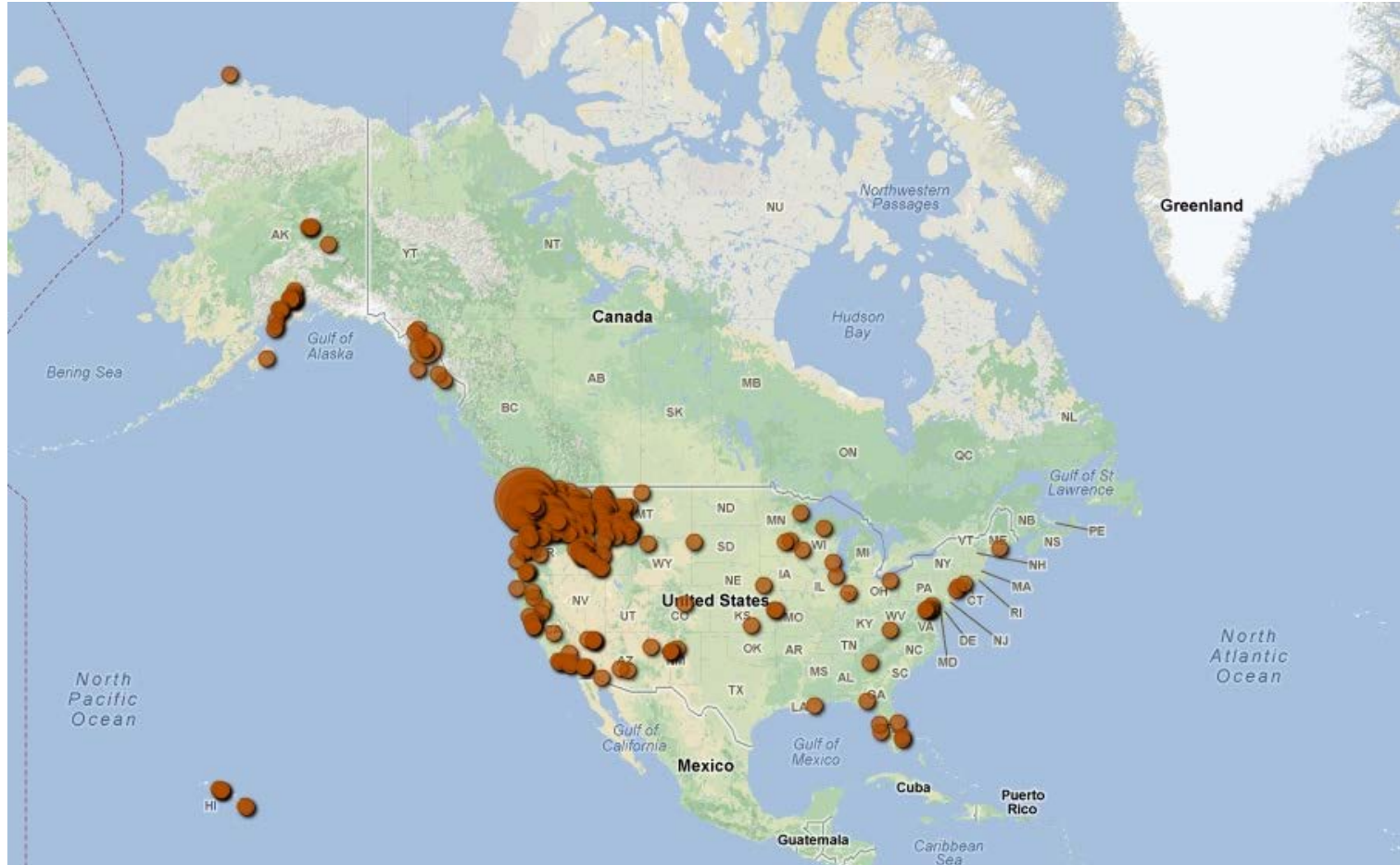
Mark
Baiter, MD



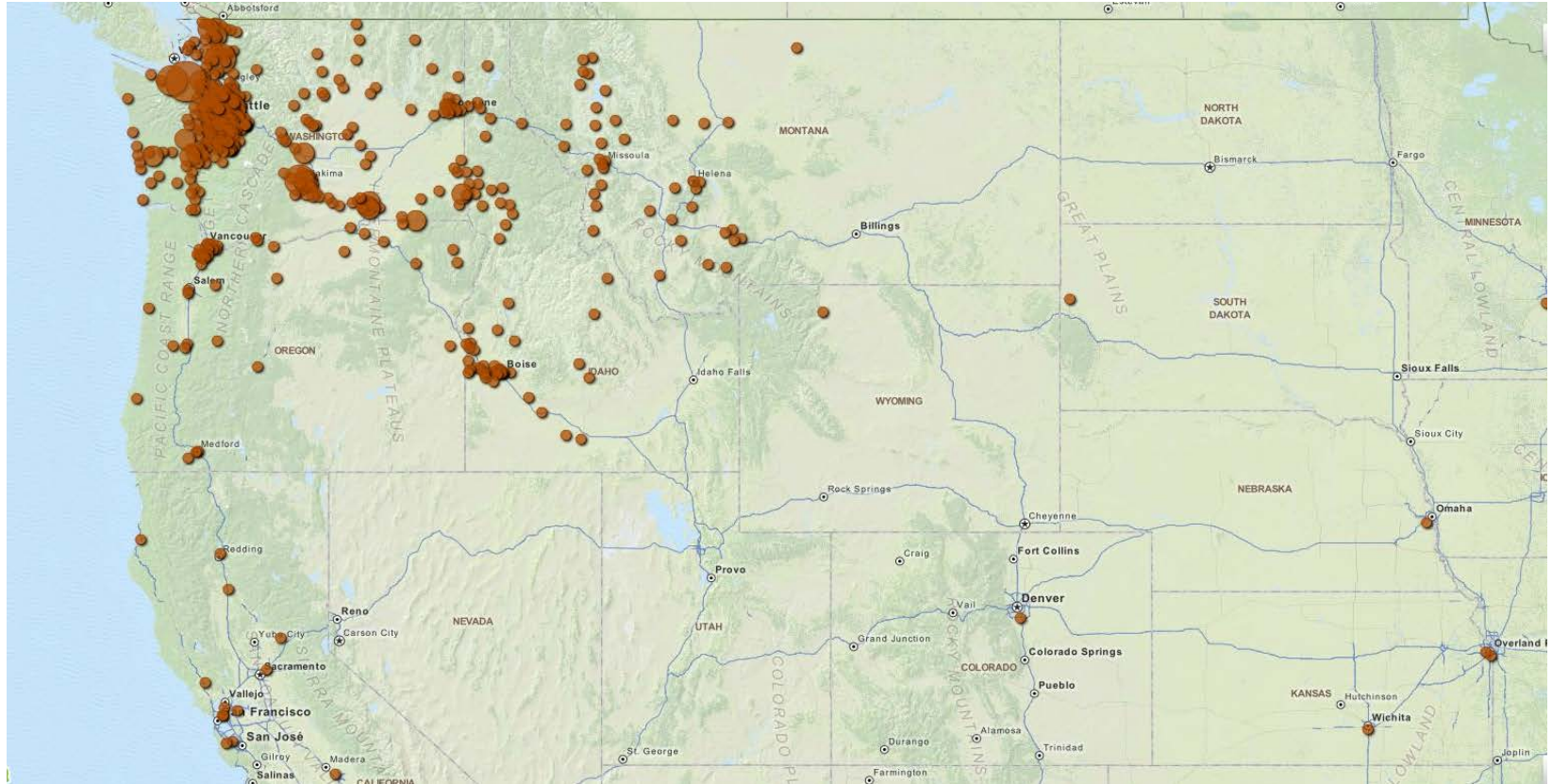
Ted
Dropcho, MD

Outreach

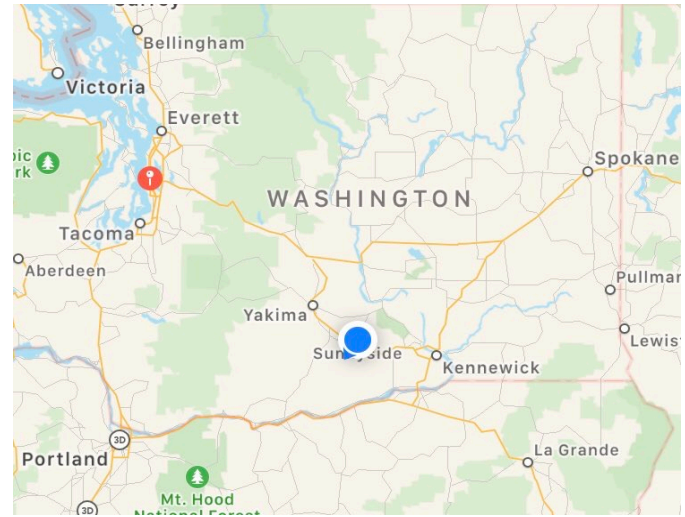
USA Referral Map



Pacific Northwest Referral Map



Eastern WA Clinic



2019	# Patients	#Operations (%)	Liver	Pancreas	Other
June	8	6 (75)	4	2	2
July	4	3 (75)	0	0	3
August	7	3 (43)	4	0	3
September	8	5 (63)	3	4	1
October	5	2 (40)	1	1	2
November	8	4 (50)	4	3	1
December	6	3 (50)	3	3	0

Alaska Outreach



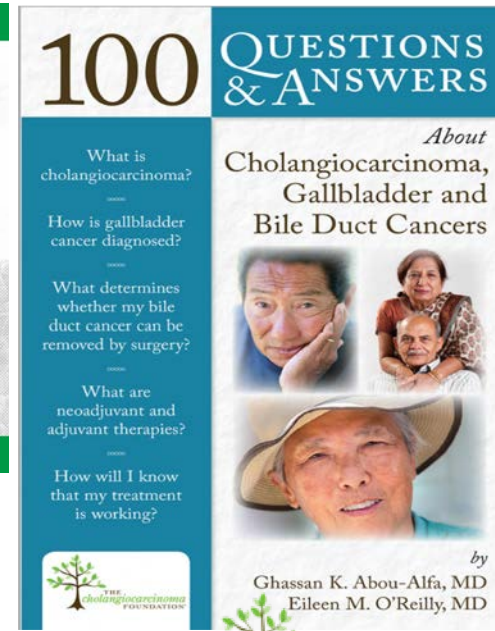
Advocacy

Advocacy Groups



Cholangiocarcinoma Foundation

www.cholangiocarcinoma.org



komodohealth

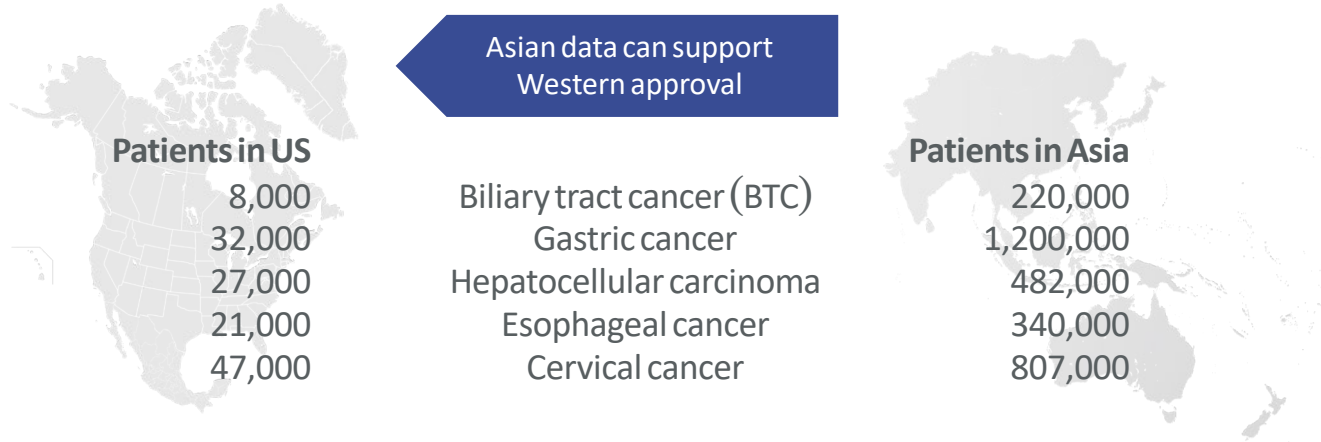
MUTATIONS MATTER
CHOLANGIOCARCINOMA FOUNDATION



Courtesy of CCF

Many Asia prevalent tumours are orphan in West

Tumor types that are prevalent in Asia but orphan diseases in the West



- Studies run in Asia where the majority of patients live
- Data is leveraged for approvals in US, EU and other global markets where often these are orphan diseases
- Few – if any – approved therapies for these indications

Slide Courtesy: Bertil Landmark, Aslan Pharmaceuticals

Khon Khaen University, Thailand



2018 2nd AP Conference, Bangkok, Thailand Satellite meetings in Busan, Korea and Shanghai, China





Flavio Rocha



Li-Tzong Chen



National Institute of Cancer Research,
National Health Research Institutes

3rd Asia-Pacific Cholangiocarcinoma Conference

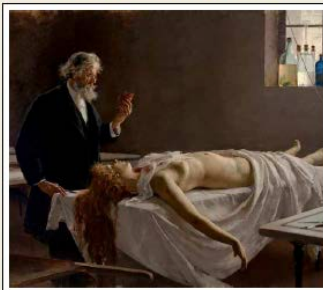
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HEPATOBILIARY SURGERY AND NUTRITION



hbsn.asapress.com

3rd Asia-Pacific Cholangiocarcinoma Conference



Awarded by
Hepato. 2017



Mar. 15-16, 2019

Taipei, Taiwan





LIVE AND ON-DEMAND

cholangiocarcinoma foundation

ANNUAL CONFERENCE

MARCH 31 - APRIL 2, 2021



THE PATIENT PERSPECTIVE TO CANCER CARE:
BETTER ALIGNING PHYSICIAN EXPECTATIONS WITH
PATIENTS' WISHES

MELINDA BACHINI

CCF ADVOCACY COORDINATOR

Cassadie Moravek, Stacie C. Lindsey, Julie Fleshman, Flavio G. Rocha, Shishir K. Maithel

46 question survey

1,011 patients completed

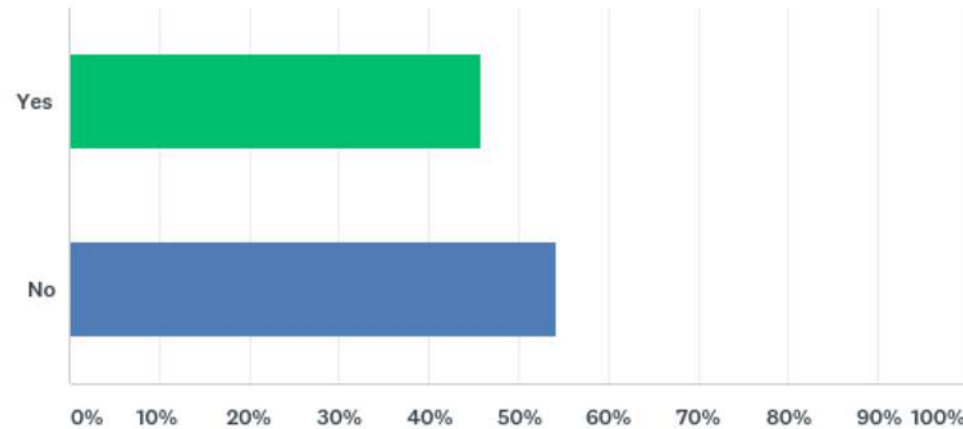


PANCREATIC
CANCER
ACTION
NETWORK



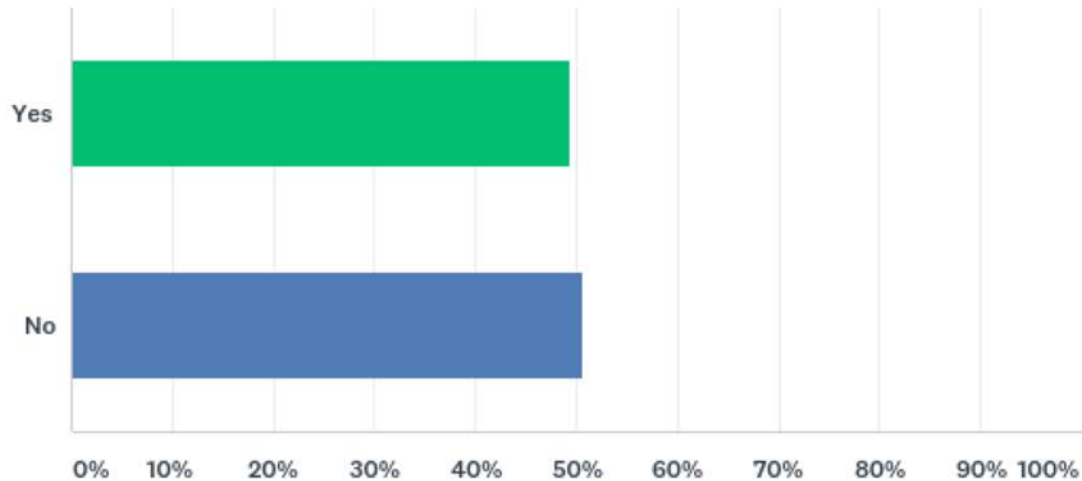
SOCIAL SUPPORT

Q13 Does your support network affect your decision-making in treatment options?



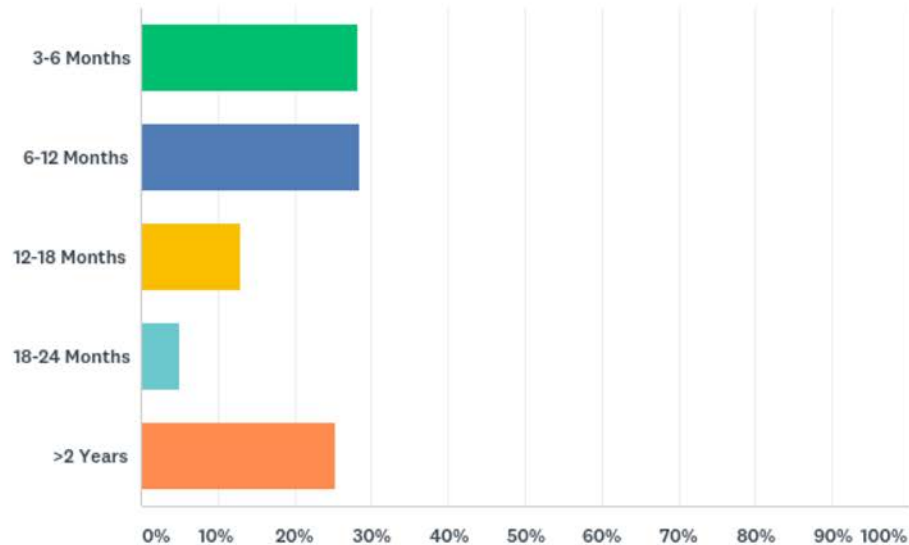
SURGERY

Q22 Would you have surgery even if there was no chance for cure?



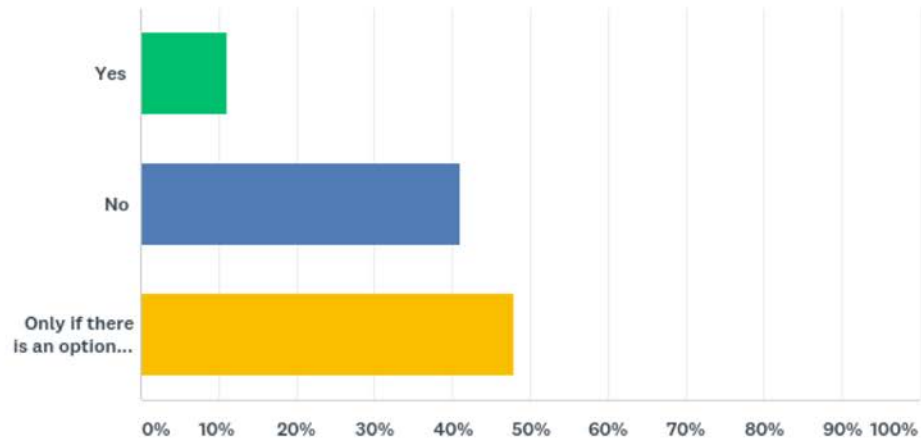
NON-SURGICAL THERAPY

Q27 If yes, how long would you be willing to endure the severe side-effects to increase your survival time?



CLINICAL TRIALS

Q46 Would you be willing to participate in a clinical trial even if you receive a placebo ("sugar pill")?



Goals for treatment

1) Identify earlier stage disease

Screen at risk and underserved populations
timely diagnosis and multidisciplinary evaluation

2) Provide highest quality surgical and medical care

Expand candidate pool for curative therapy
Reduce operative morbidity, enhance recovery and deliver
chemotherapy/XRT with minimal toxicity

3) Novel therapeutics

Develop more effective locoregional/systemic regimens
Test thru clinical trials for all stages of disease

Goals for the system

- Evaluate processes regularly
 - Always look to improve and innovate
 - Seek feedback from stakeholders
 - Adapt to changing conditions and environment
- Engage advocacy groups
 - Help design trials
 - Reach out to target audience
 - Provide content for discussion boards/support groups
- Expand outreach
 - Offer consultative/CME services
 - Virtual tumor boards
 - Smooth referral/navigation process



Thank You