

Profile

With over 12 years of experience in healthcare consulting, project management and data analytics, John is passionate about making analytics accessible to all healthcare operations stakeholders to support data-driven decision making.

Professional experience

- Principal, Compass Healthcare Management Consulting Vancouver BC, 2021 to present
 - Principal of new healthcare data analytics and management consulting firm
 - Key architect of advanced workload and capacity projection methodologies to estimate future requirements for health care resources (acute care beds, operating rooms, etc.), physician and nurse staffing requirements to support activity, and capital and ongoing financial needs
 - Lead developer of online client engagement portal for rapid information gathering, document approval workflows, and intuitive reporting and scenario modeling
- Director of Development, Logibec (formerly, AnalysisWorks) Vancouver BC, 2009 to 2021
 - Senior project lead and methodologist, specializing in leading client engagements involving workload and capacity projections and scenario modeling, inpatient and surgical resource allocation, and activity-based costing methodologies in all areas of health care service delivery
 - Member of division senior management team with responsibilities including strategic planning, new business development, hiring, onboarding and professional development
 - Agile team lead, supporting teams in ongoing workload planning and management to meet client expectations and deadlines while maintaining work-life balance
 - Lead architect and original developer of LightHouse surgical and inpatient reporting systems, later Director of Development of five- to six-person team
- Programmer, Atlantic Canada Opportunities Agency Moncton NB, 2005 to 2007
 - Developed business critical intranet applications to support financial analysts with client management, loan repayment status, and risk profiles
 - Responsibilities included application architecture, UI/UX design, and quality assurance

Education

- Master of Science (Mathematics), Simon Fraser University
 Burnaby BC, 2007 to 2009
 Focus: Operations Research and combinatorial optimization, 3.8 CGPA
- Bachelor of Computer Science, University of New Brunswick Fredericton NB, 2000 to 2005
 - \circ First class honours, specialized in Theory and Computation, 3.8 CGPA



Selected key project experience

 LightHouse implementation and maintenance at various health authorities: 2017 to 2021: Vancouver Coastal Health Authority and Providence Health Care 2016 to 2021: Vancouver Island Health Authority

2015 to 2021: Alberta Health Services: Edmonton Zone

- LightHouse is a "software as a service" reporting tool for Surgery/Endoscopy and Inpatient activity, and includes standard modules around surgical access and efficiency, inpatient patient placement and length of stay opportunity, as well as full episode of care activity-based costing for surgery and inpatient cases
- Lead implementation and maintenance of Inpatient modules, supported implementation and maintenance of Surgical and Endoscopy modules
- As a "software as a service" reporting tool with regular updates (fiscal-period or monthly), supported data cycles import, quality assurance and release to clients
- Included "ad-hoc" analytical support involved ongoing engagement with key stakeholders in understanding and communicating results in many areas including:
 - Surgery and Endoscopy: Waitlist management (e.g., FIFO selection opportunity) and maintenance, wait time performance (including Wait 1 versus Wait 2 times and booking entry lags), OR allocations, room efficiency opportunities, slate smoothing, and activity-based costing (including inpatient costs)
 - Inpatient: Patient cohort and bed mapping analyses, length of stay improvement opportunities (e.g. ALOS:ELOS, ALC days), patient flow opportunities (e.g. day of week patterns, bottlenecks from Emergency), in-hospital mortality risk levels, activity-based costing
- Design and support of new LightHouse modules and features, including quality assurance and client support

• 2018 to 2021: Richmond Hospital Acute Care Tower (ACT) project

- Senior project consultant and engagement lead in support of Richmond Hospital's Acute Care Tower, preparing workload and capacity need projections out to 2035 in support of a clinical services plan and detailed functional program
- Inpatient program included consideration of Mental Health Psychiatric Emergency Unit (PEU), dialysis-need estimates, and consideration of the impact new residential care capacity opening in the region would bring to new hospital
- Surgical program included consideration of anesthesia levels in estimating demand for new procedure rooms, extending slates from 7.5-hour to 9-hour durations, C-Section maternity OR need, and capacity to meet wait time targets and "catch up" on current waitlist backlog
- Emergency program included modeling of patient flows to different care spaces and estimated capacity requirements through achieving length of stay targets
- Medical Imaging program considered options around shift modalities, wait list backlogs and wait time performance, and impact of hours of operations
- o Scope of work included high-level pharmacy and laboratory projections



High-level list of notable project experience

Project area key: SRG: Surgical/Perioperative IP: Inpatient MI: Medical Imaging ED: Emergency AMB: Ambulatory Care +: Other

- Vancouver Coastal Health Authority and Providence Health Care
 - $\,\circ\,$ 2021: MRI and CT capacity and demand modeling $_{MI}$
 - o 2020 to 2021: Activity-based costing for Surgery and Inpatient care SRG IP
 - о 2020 to 2021: LightHouse for Medical Imaging implementation and rollout (3 sites) м
 - 0 2018 to 2021: Richmond Hospital new Acute Care Tower project SRG IP ED MI AMB +
 - \circ 2018 to 2020: Vancouver Acute bed mapping and efficiency analysis support IP
 - o 2018 to 2019: Richmond Hospital bed mapping and efficiency analysis IP
 - о 2019: Mount St. Joseph's Future State Workload Projections SRG IP ED AMB
 - о 2018: Vancouver Acute High-Level Master Planning SRG IP MI ED AMB +
 - o 2017: Lion's Gate perioperative platform future state projections (refresh) srg
 - o 2017: Lion's Gate perioperative platform future state projections srg
 - o 2016 to 2017: Holy Family Hospital current and future state workload projections IP +
 - o 2013: Providence Healthcare Decision Support review, development of go-forward plan +
 - о 2012: St. Paul's Hospital Ambulatory Clinical Services Plan SRG MI AMB +
 - o 2011 to 2013: St. Paul's "needs based" endoscopy room time allocation +
 - o 2011: Vancouver Acute Mental Health inpatient bed projections for new tower IP
 - o 2010 to 2013: Surgical OR Resource Allocation Methodology (RAM) for various sites srg

• Vancouver Island Health Authority

- o 2018 to 2021: Activity-based costing for Surgery and Inpatient care (3 sites) SRG IP
- 0 2016 to 2018: North Island Hospital workload projections SRG IP ED AMB
- 2016 to 2018: Inpatient financial sustainability and zero-based budget modeling for inpatient units (8 sites) IP

• Fraser Health Authority

- o 2021: Surgical public and private capacity modeling to meet 5-year demand srg
- o 2021: New Burnaby Hospital perioperative platform projections for master planning srg
- o 2010 to 2013: Surgical OR Resource Allocation Methodology (RAM) (6 sites) SRG
- 2010 to 2012: Inpatient bed mapping and efficiency analysis (4 sites) IP

• Alberta Health Services Edmonton Zone

- 2020 to 2021: Zone-wide modeling of lost cases due to COVID pandemic, ongoing monitoring of recovery efforts (9 sites) srg
- o 2020: Royal Alexandra bed mapping and efficiency analysis IP
- o 2019: Covenant Health bed mapping and efficiency analysis (2 sites) IP
- o 2018: Edmonton Zone rural sites bed mapping and efficiency analysis (2 sites) IP
- o 2013: Covenant Health bed mapping and efficiency analysis (2 sites) IP
- o 2012 to 2015: Edmonton Zone Surgical OR Resource Allocations (6 sites) srg

• Saskatchewan Health Authority

• 2019: Saskatoon-zone hospital bed mapping, efficiency analysis and future state demand analysis (3 sites) IP



- 2017: Regina-zone hospital bed mapping, efficiency analysis and future state demand analysis (Refresh, 2 sites) IP
- \circ 2015 to 2016: Regina-zone operating room time vacancy tracking system srg
- 2015: Regina-zone acute future state bed needs analysis IP
- 2014 to 2017: Regina-zone hospital congestion daily forecasting model and web application IP
- 2014 to 2015: Regina-zone Surgical OR Resource Allocation srg
- 2014 to 2015: Patient flow analytics and dashboarding IP ED
- o 2013 to 20144: Regina-zone hospital bed mapping and efficiency analysis IP
- BC Ministry of Health and Provincial Health Services Authority
 - 2020 to 2021: BC Ministry of Health: provincial-wide modeling of lost cases due to COVID pandemic, ongoing monitoring of recovery efforts (all BC health authorities) sRG
 - 2019: BC Mental Health Addictions: Current and future state projections for tertiary mental health care beds +
 - o 2018: Cardiac Services BC: Provincial-wide EP and ICD activity-based costing +
 - 2016: Cardiac Services BC: Provincial-wide pacemaker activity-based costing +
 - 2015: BC Ministry of Health: Health services analytics review +
 - 2011: Perinatal Services BC: Future state service delivery consultation and options document +
 - 0 2011: Demand Projections for BC Children's and Women's Hospital IP ED
 - o 2010: BC Children's Hospital: Operating room allocation methodology (ORAM) srg
 - 2009: Children and Youth with Special Needs: Stakeholder survey implementation and analysis of key results +

• Other projects

- 2019: Yukon Hospital Corporation (YK): Perioperative platform projections in support of functional program and business case srg
- o 2017: Lakeridge Health (ON) bed mapping and efficiency analysis (5 sites) IP
- 2015 to 2016: Northern Health (BC): Master planning for new University Hospital of Northern British Columbia (UHNBC) SRG IP MI ED AMB +
- o 2015: Northern Health (BC): Bed mapping and efficiency analysis for UHNBC IP
- 2014 to 2015: St. Joseph's Health Centre Toronto (ON): Bed mapping and efficiency analysis IP