



**The ANCHOR Project: A Nurse's and Dietitian's Perspective and Role
in a Multidisciplinary, Community-Based Research Study**
Krista Courtney-Cox RN, BScN, CCRP
Norma Campbell Pdt., CDE

Our Partners:  **NOVA SCOTIA**
Health

 **Capital Health**

 **Cape Breton District
HEALTH AUTHORITY**
Making Healthier Choices Together

 **HEART &
STROKE
FOUNDATION
OF NOVA SCOTIA**
Finding answers. For life.

 **QEII FOUNDATION**
excellence • innovation • leadership

 **Pfizer**
Life is our life's work

Why ANCHOR?

- **ANCHOR (A Novel approach to Cardiovascular Health by Optimizing Risk management) was conceived to address an increasing CVD burden**
 - We are facing a growing cardiovascular (CV) risk factor burden and an increasing prevalence of CV disease and metabolic conditions
 - Atlantic Canadians have the greatest CV risk factor burden and the highest risk of dying from heart disease



Study Primary Objectives

- To improve management of global CV risk of patients within the primary care setting
- To increase patient adherence with lifestyle and drug therapy aimed at decreasing global CV risk

ANCHOR Project

Partners

- Nova Scotia Department of Health
- Capital District Health Authority
- Cape Breton District Health Authority
- Heart and Stroke Foundation of NS
- Pfizer Canada
- QE II Foundation

Communication Committee

- Communication representatives from partner organizations

Scientific Committee

- Principal Investigators
- Project Manager
- Medical & Research Specialist, Pfizer Canada

Health Economics Committee

- Research Health Economist, Department of Medicine, Dalhousie University
- Senior Health Economist, Department of Health
- Manager of Pharmaceutical Services, Department of Health
- Governmental Affairs Manager, Pfizer Canada
- Project Manager
- Principal Investigators

Steering Committee

- Nova Scotia Department of Health
- Capital District Health Authority
- Cape Breton District Health Authority
- Heart & Stroke Foundation of Nova Scotia
- Pfizer Canada
- Nova Scotia Dept of Health Promotion & Protection
- Project Manager
- Principle Investigators
- ANCHOR Site Team Representative
- Other Community Health Care Professionals

Sub-Committees

Site Teams

Duffus Health Centre

- Family Physician Lead
- Nurse
- Dietitian
- Pharmacist
- Exercise Specialist

Sydney Family Practice

- Family Physician Lead
- Nurse
- Dietitian
- Pharmacist
- Exercise Specialist

The ANCHOR Model



Study Design

- **Prospective cohort design with a comparison control group**
 - 1500 participants, 750 in each of two sites
 - Control group in a 3rd primary care site
- **Pre-post measurement:**
 - Health risk assessment
 - Individual goal setting
 - Objective parameters (e.g., BP, lipids, glucose)
 - Readiness to change, motivation, barriers
 - Other parameters (e.g., drug and health service use to inform economic analysis)

Study Design

- **Two active Primary Care Practices:**
 - **Halifax – Alternate funding arrangement (salary)**
 - **Sydney – Fee-for-service funding**
 - **Second Sydney site provided the control group**



The ANCHOR Team

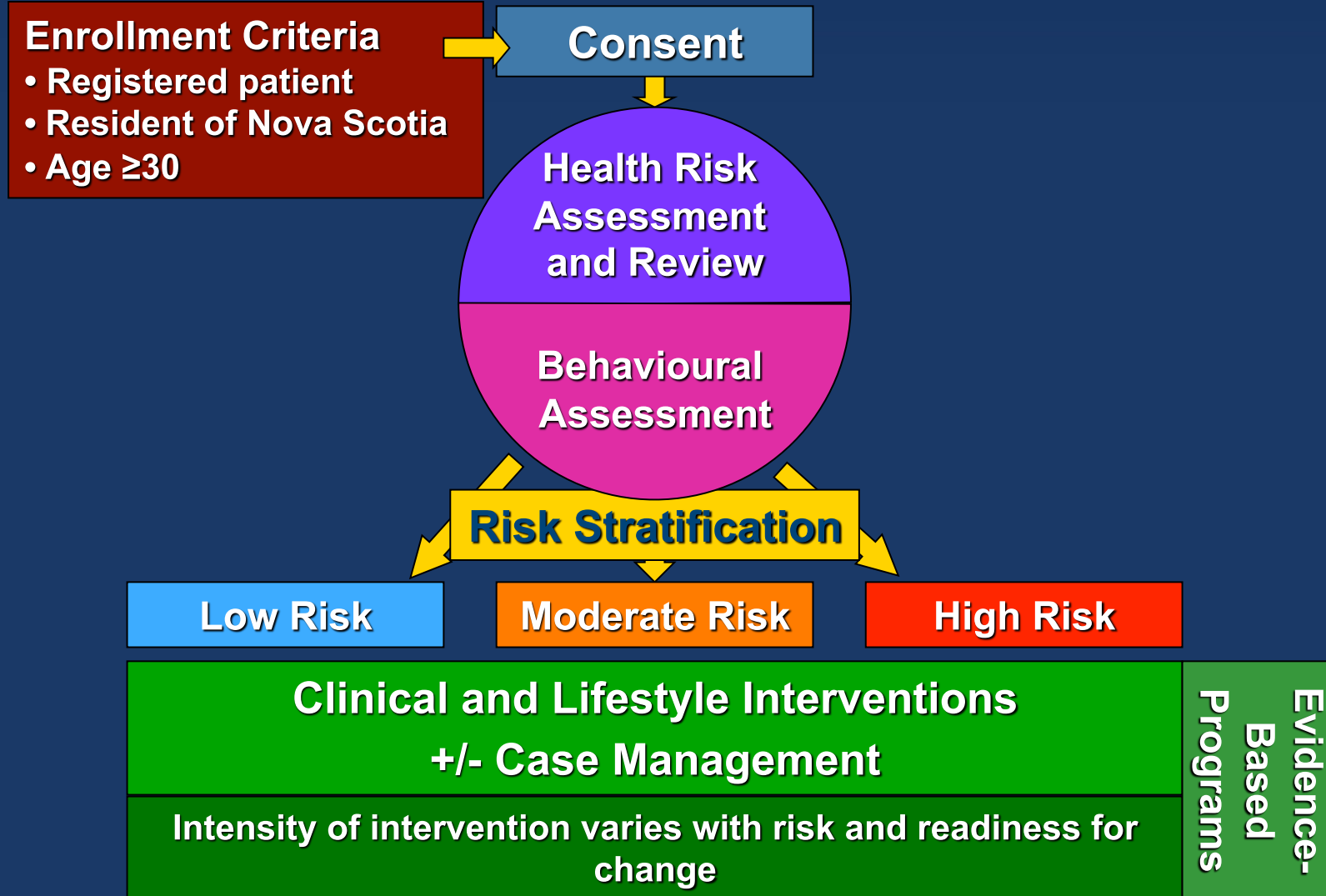
- Practice-based physician lead
- Nurse / research coordinator
- Dietitian / research coordinator
- Extended team members
 - Exercise specialist and physiotherapist
 - Community pharmacist
 - Social Worker on site in Halifax Practice
 - Mental health nurse
- Study investigators
- Project Manager

Health Risk Assessment

- **Calculates an individual's 10-year risk of having a coronary event using the Framingham Score**
 - **Low Risk: <10% risk over 10 years**
 - **Moderate Risk: 10-20% risk over 10 years**
 - **High Risk: >20% risk over 10 years**
or **most diabetes** or any **atherosclerotic disease**

*Based on National Cholesterol Education Program
(NCEP) Guidelines*

Patient Assessment Flow



Metabolic Syndrome

- **Metabolic Syndrome (NCEP) Criteria**
 - **Three or more of the following:**
 - **Waist Girth >102 cm (Male) or 88 cm (Female)**
 - **HDL <1.0 mmol/L (Male) or 1.30mmol/L (Female)**
 - **BP ≥130/85 /BP meds /personal history**
 - **Fasting glucose ≥5.6 mmol/L /diabetic /diabetic medication**
 - **Triglycerides ≥1.69mmol/L**

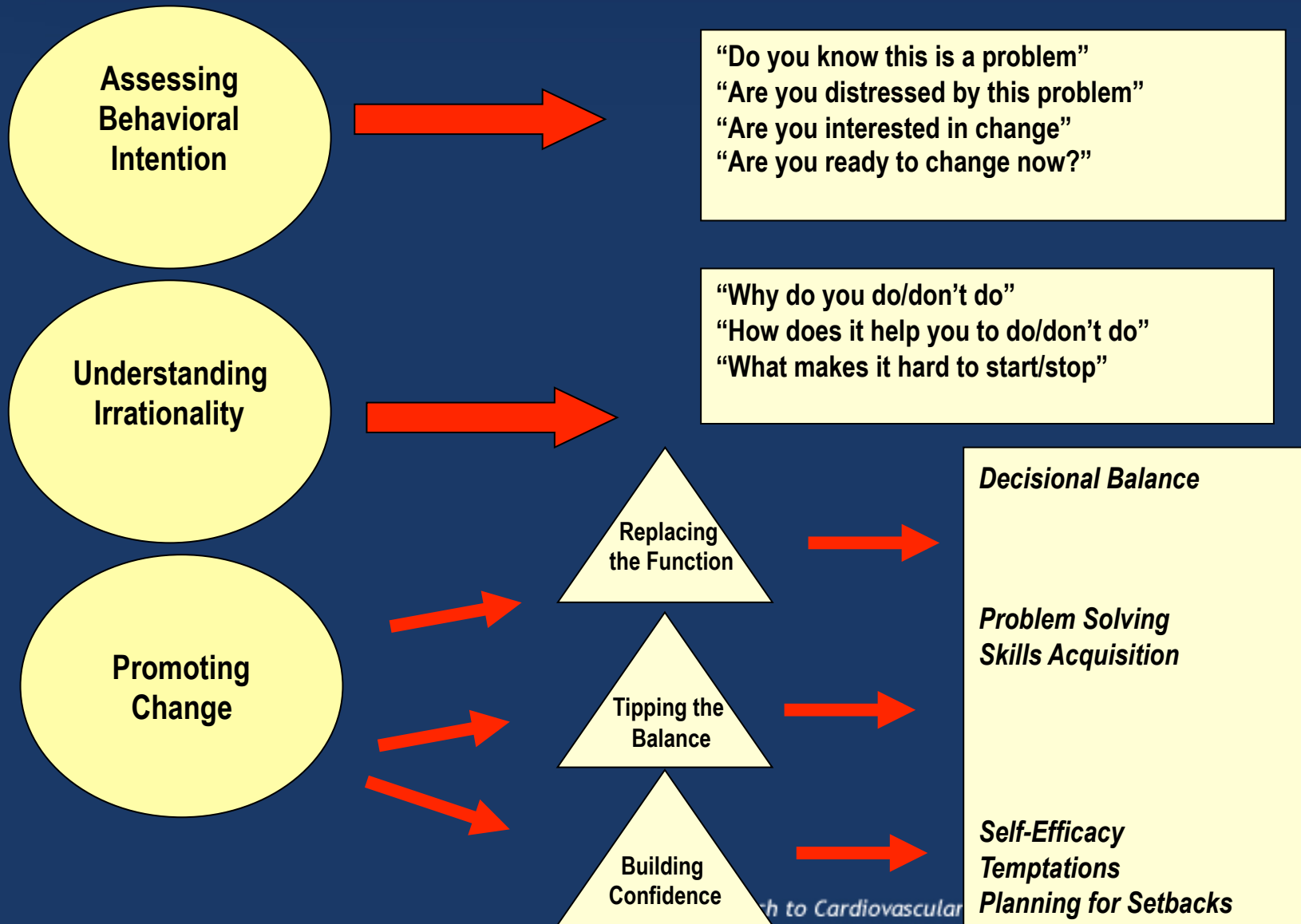
Behavioural Intervention

- **Assess patient readiness to change**
- **Prochaska's Stages of Change:**
 - **Pre-contemplation**
 - **Contemplation**
 - **Preparation**
 - **Action**
 - **Maintenance**

Behavioural Intervention

- **Motivators and strength of motivators**
- **Barriers and strength of barriers**
- **Goal selection:**
 - **Specific**
 - **Reasonable**
 - **Can be maintained over long term**

Behavioural Intervention





Role Play Session



Case Study

Case:

- 45 year old female
- 5'6" (1.67m) tall
- 280lbs (127.2kg)
- BMI= 45.7 (obese)
- Waist= 46in (118.1cm)
- Poor lipid profile- TC 6.99, LDL 4.77, HDL 1.04, TG's 2.3, ratio 6.72
- Pre-diabetic- BS 6.9
- BP 148/92, untreated
- Smoker
- Framingham Risk points: 22, 17% (moderate risk), plus metabolic syndrome= high risk.
- Married
- Works full time as a secretary for the school board.
- 2 elementary aged children, in school
- Husband works shift work at the local pulp mill

Summary

- **Primary health care research permits evaluation of innovations in health care delivery**
- **The ANCHOR project is one such innovative care approach being evaluated**
- **Preliminary results suggest that CV risk can be effectively managed in primary care, facilitated by multidisciplinary teams**
- **Ongoing research will explore the extent to which early gains and clinical benefit can be maintained long term**



Thank you!

Please visit our website at
www.ANCHORproject.ca



Minimal Intervention Study

A Novel approach to Cardiovascular Health by Optimizing Risk management



Minimal Intervention Study

- **Aims to evaluate the efficacy of different levels of interventions to maintain/further enhance the health outcome improvements produced by the original ANCHOR behavioral intervention**
 - **Important to identify the most efficient means of sustaining these improvements in health behavior by evaluating the “minimum dosage” or frequency of patient-clinician contact needed**
 - **ANCHOR participants who have successfully changed their risk status will be recruited**

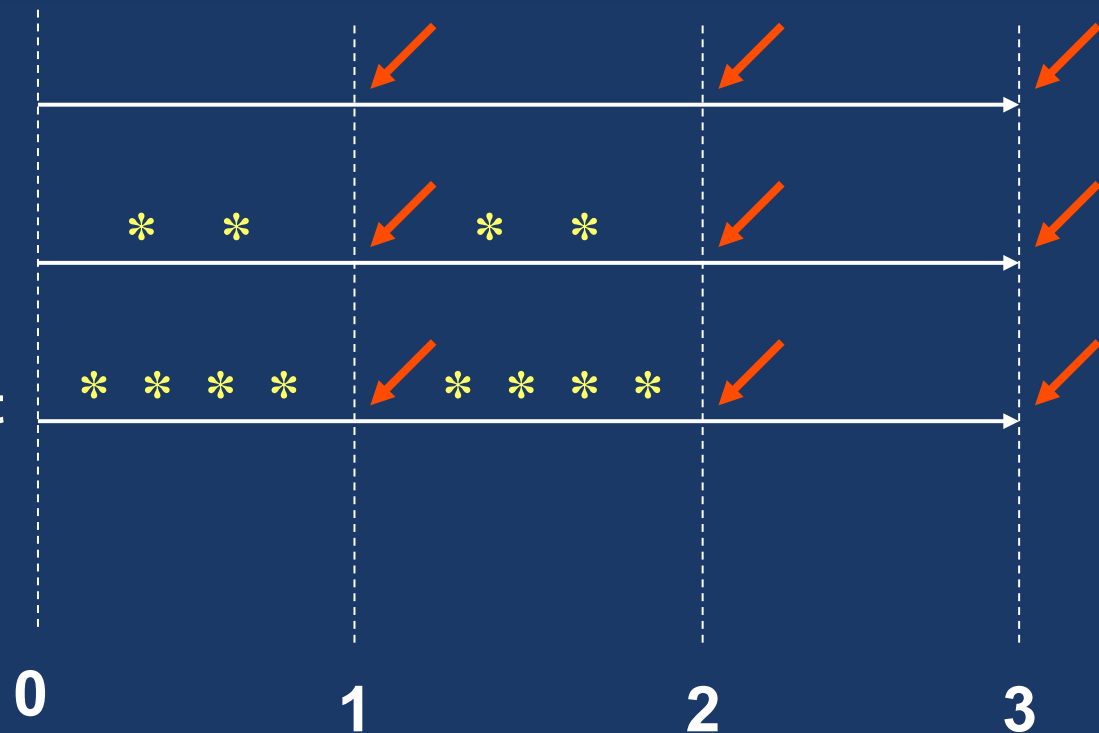
Minimal Intervention Study

Randomized Intervention Over 3 Years

**No Contact
(Control Group)**

**Stable Low Contact
(2:2 Group)**

**Stable High Contact
(4:4 Group)**



 Formal reassessment with HRA

 Contact to review goal setting/progress

Years