



VCU Medical Center A Comprehensive Level I Trauma Center

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30 YEARS OF EXCELLENCE & LEADERSHIP IN TRAUMA CARE

- 1947** Evans-Haynes Burn Center opens as the first civilian burn center in the US
- 1981** First designated Level 1 Trauma Center in VA
- 1984** Center for Trauma and Critical Care Education (CTCCE) launched with the first university affiliated, accredited paramedic program
- 2005** ACS Level 1 Trauma Center verification awarded
- 2010** Panamerican Trauma Society (PTS) headquarters move to VCU
- 2011** Evans-Haynes Burn Center verification
- 2013** ACS Level 1 Pediatric Trauma Center verification

2014

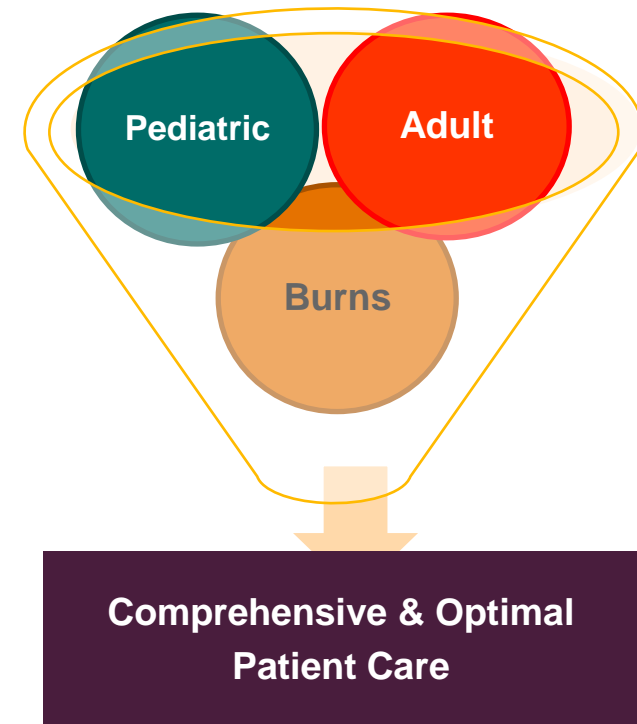
- Evans-Haynes Burn Center re-Verification
- ACS Level 1 Trauma Center re-Verification for the 4th time
- Paramedic Training Center- CoAEMSP Re-accreditation

2015

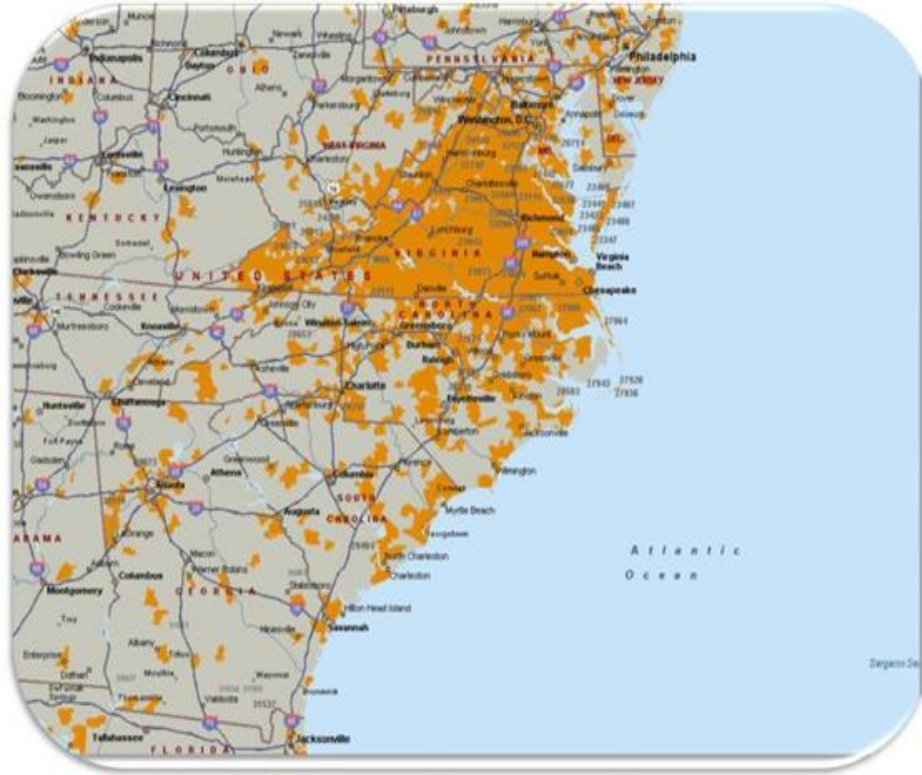
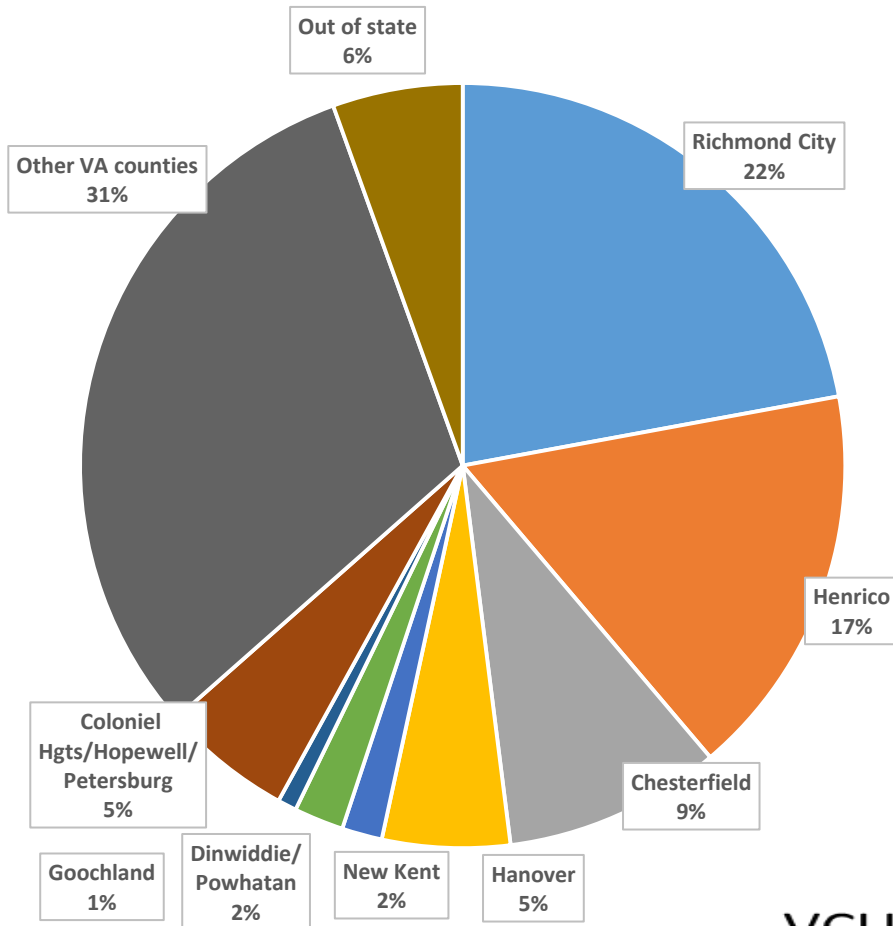
- State redesignation as comprehensive Level I Trauma Center

2016

- ACS Level 1 Pediatric Trauma Center re-verification
- State designation of Pediatric and Burn Programs



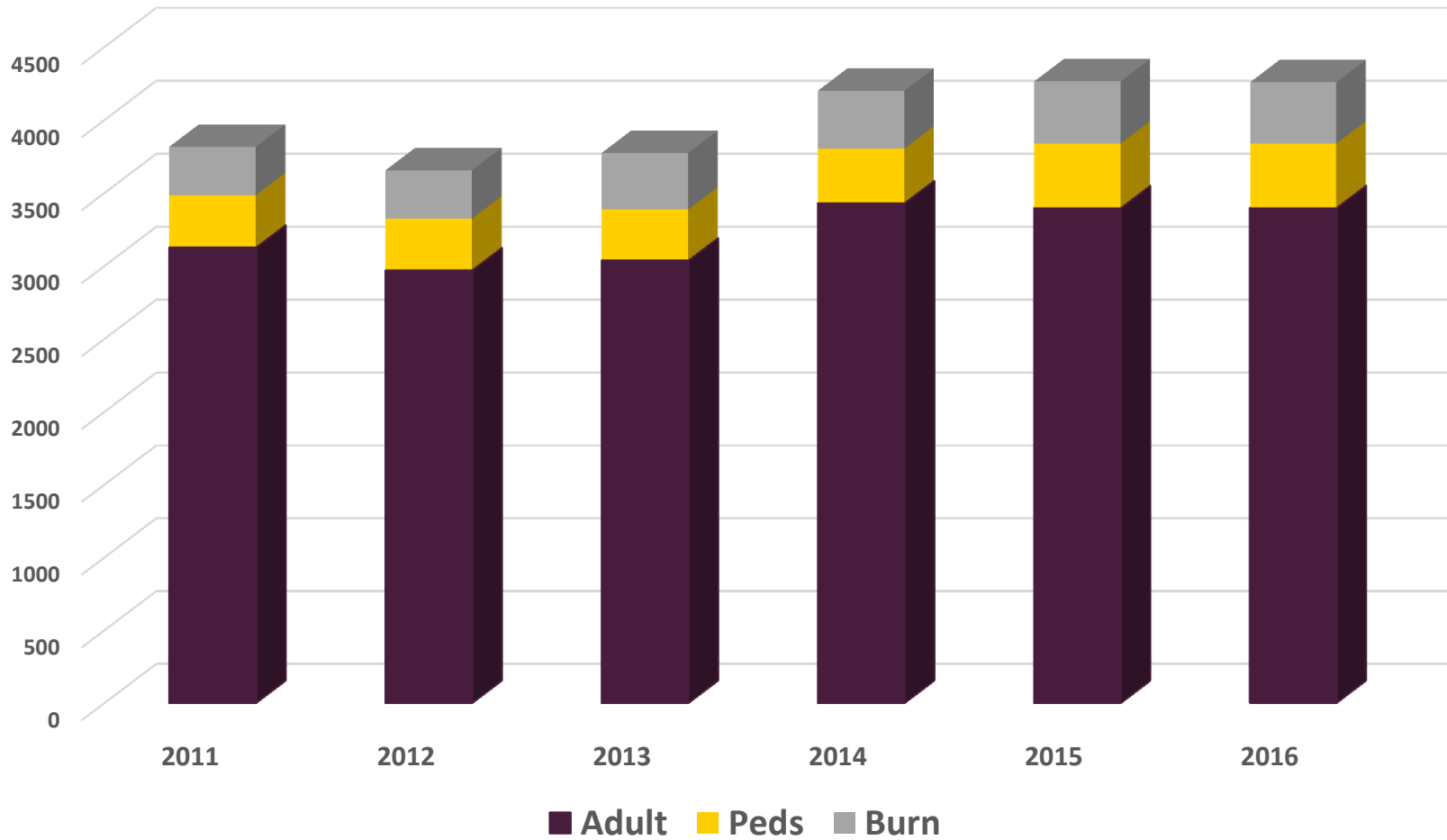
REGIONAL PROVIDERS



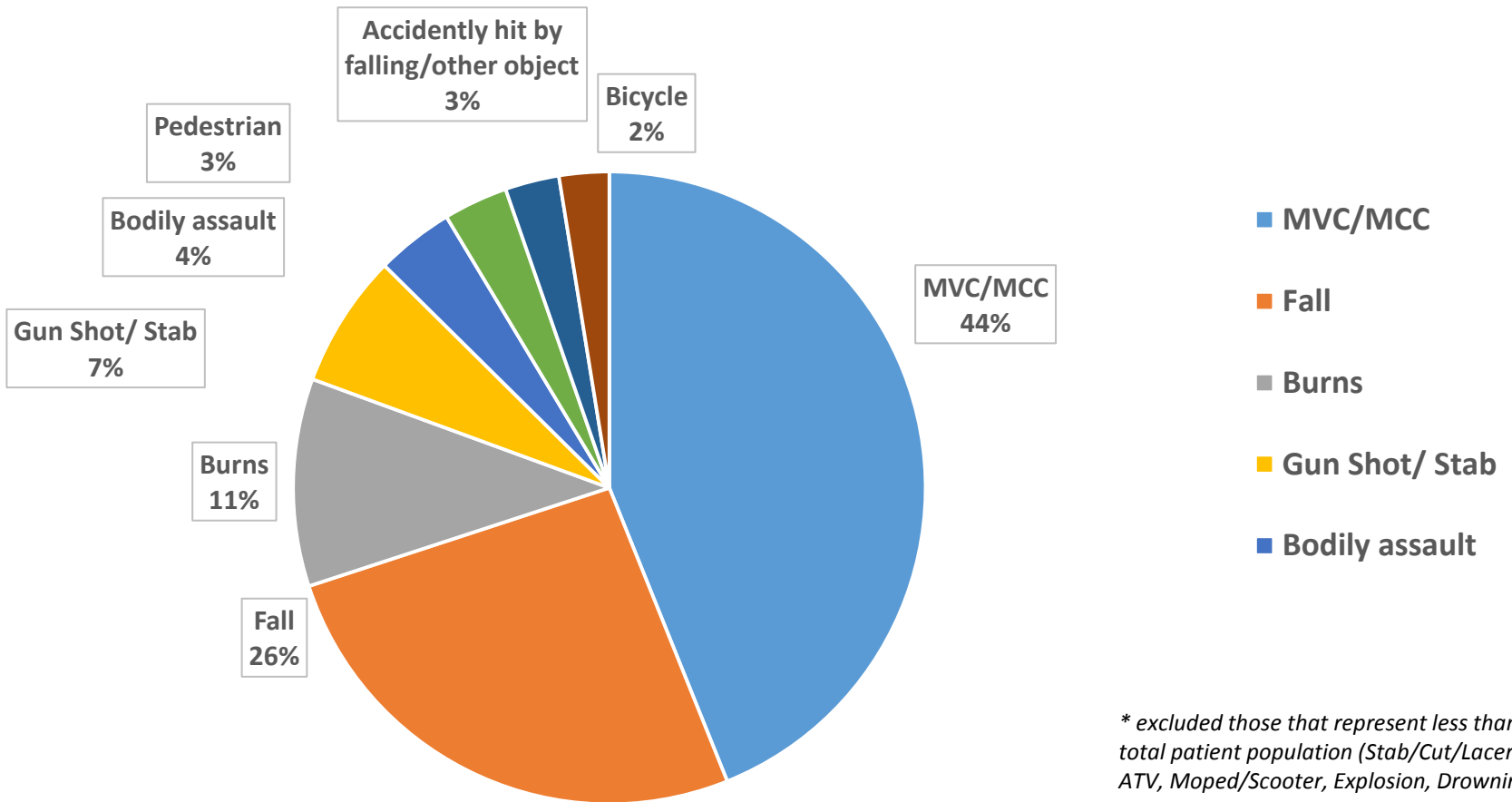
VCU Medical Center trauma serves 70 Virginia counties, D.C., NC and MD

TRAUMA ADMISSIONS

Fiscal Year Trend



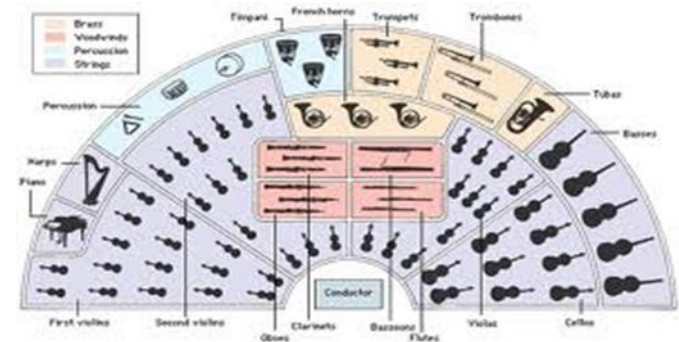
MECHANISMS OF INJURY*



Clinical Care-An Orchestrated Process

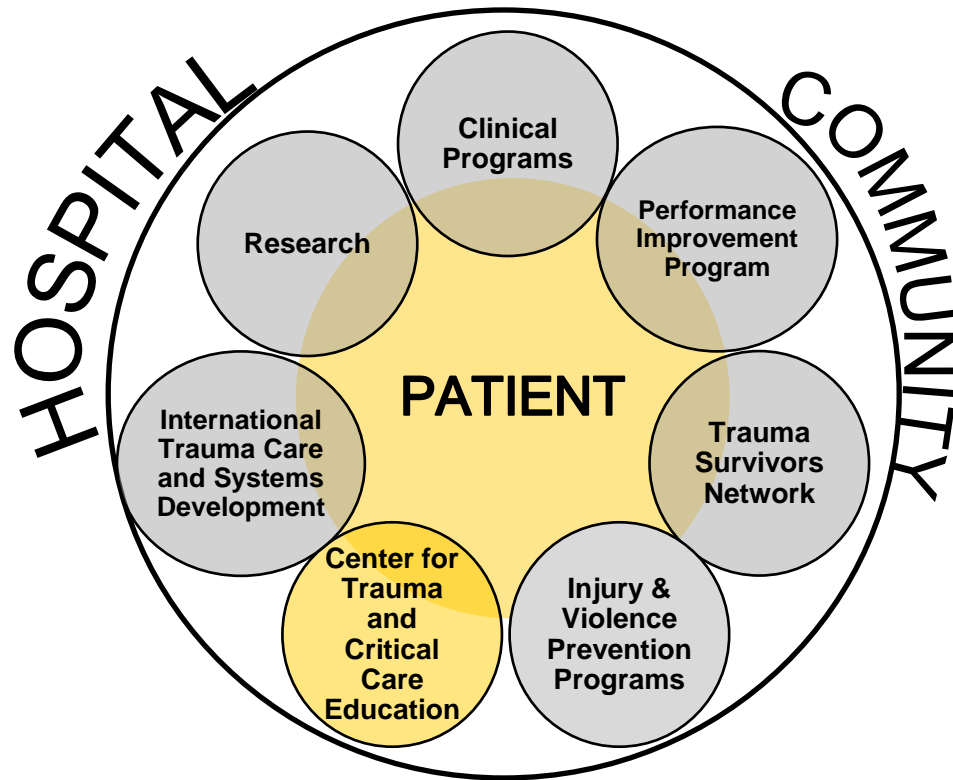
Multidisciplinary team

- Attending Board Certified physicians
- Nurses
- Nurse practitioners
- Case managers
- Social workers
- Pharmacists
- Dieticians
- Physical therapists
- Occupational therapists
- Speech therapists
- Psychiatrist
- Trauma registry



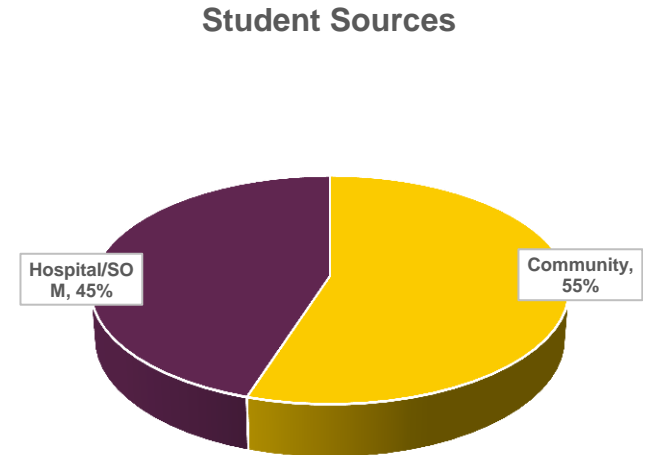
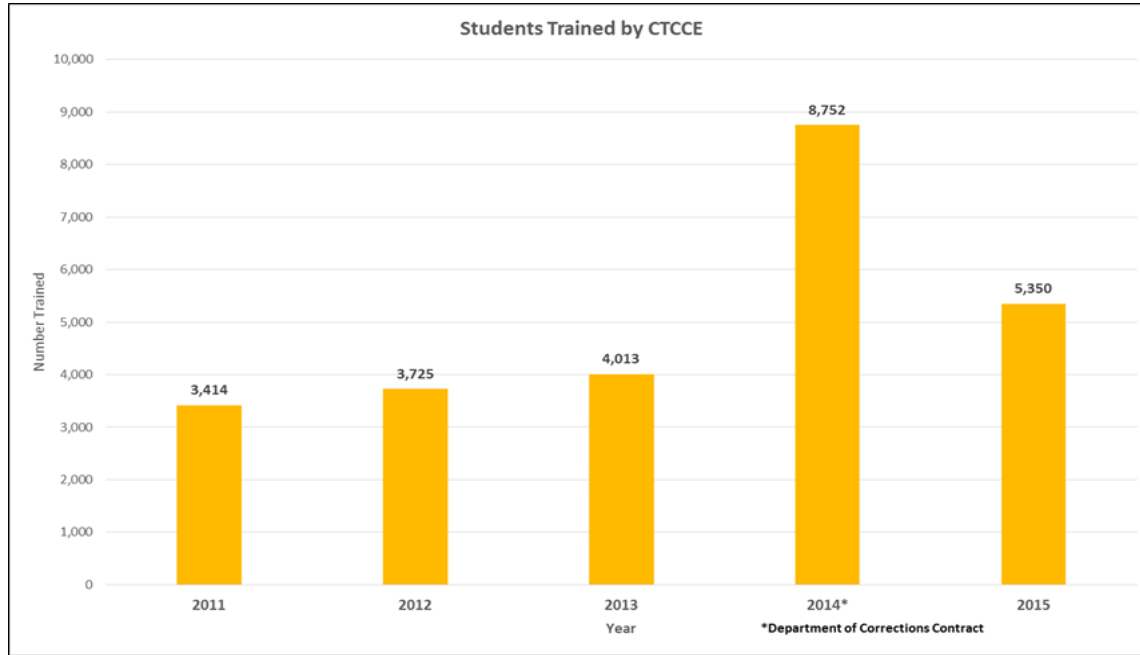
**Comprehensive, Orchestrated,
Evidence Based Collaborative Care
from admission through discharge and
recovery**

VCU Level I Trauma Center



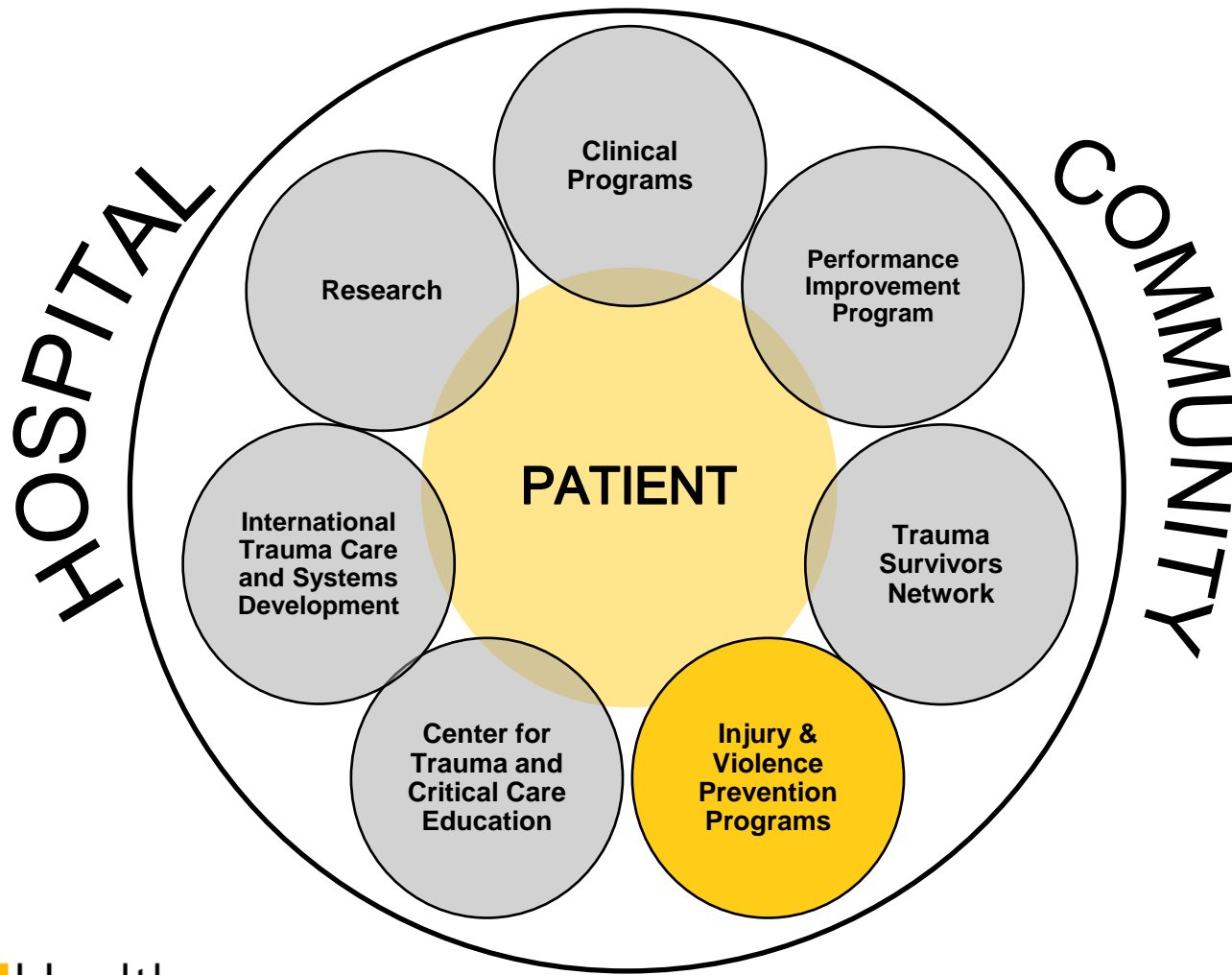
Center for Trauma & Critical Care Education

- Provides more than 20 different prehospital, trauma, nursing and critical care related courses



- 2015 Rural Trauma Team Development Course
 - Four courses through 2016
- US Airforce Rescue Squadron-Clinical Training
 - University of New Mexico & VCU collaboration

VCU Level I Trauma Center



Trauma Center-Community Partnership Paradigm

Trauma centers active leading role in injury and violence prevention activities, inform and collaborate with their communities, and monitor the effect of prevention & intervention programs

Trauma Centers

Leadership

Data registry

Expertise

- Epidemiology
- Demographics
- Public health

Windows of opportunities



Community Leaders

Law enforcement

Government

Research

Youth services

Local businesses

Funding agencies

J Trauma. 2004;56:1197–1205.

Window of opportunity - susceptible moment

When does a gang member ever let any one this close to him

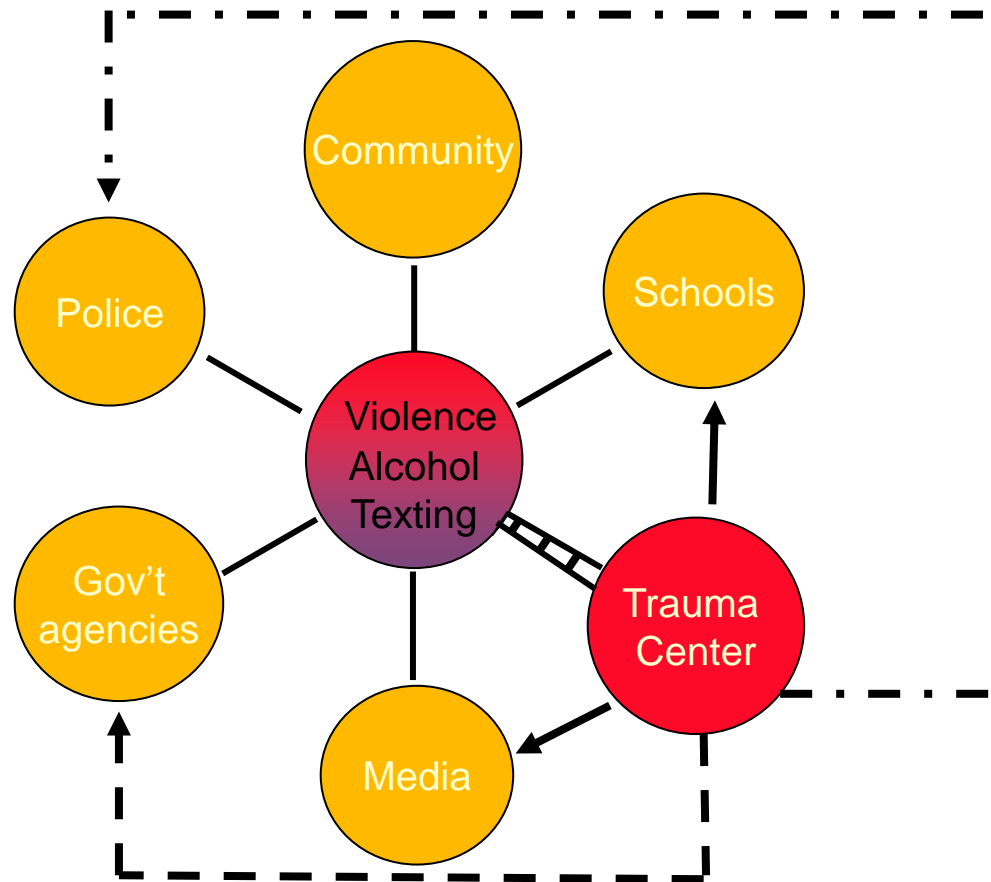


Injury/Violence-Trauma Center Outreach Model

IVPP:
Community
2014-16

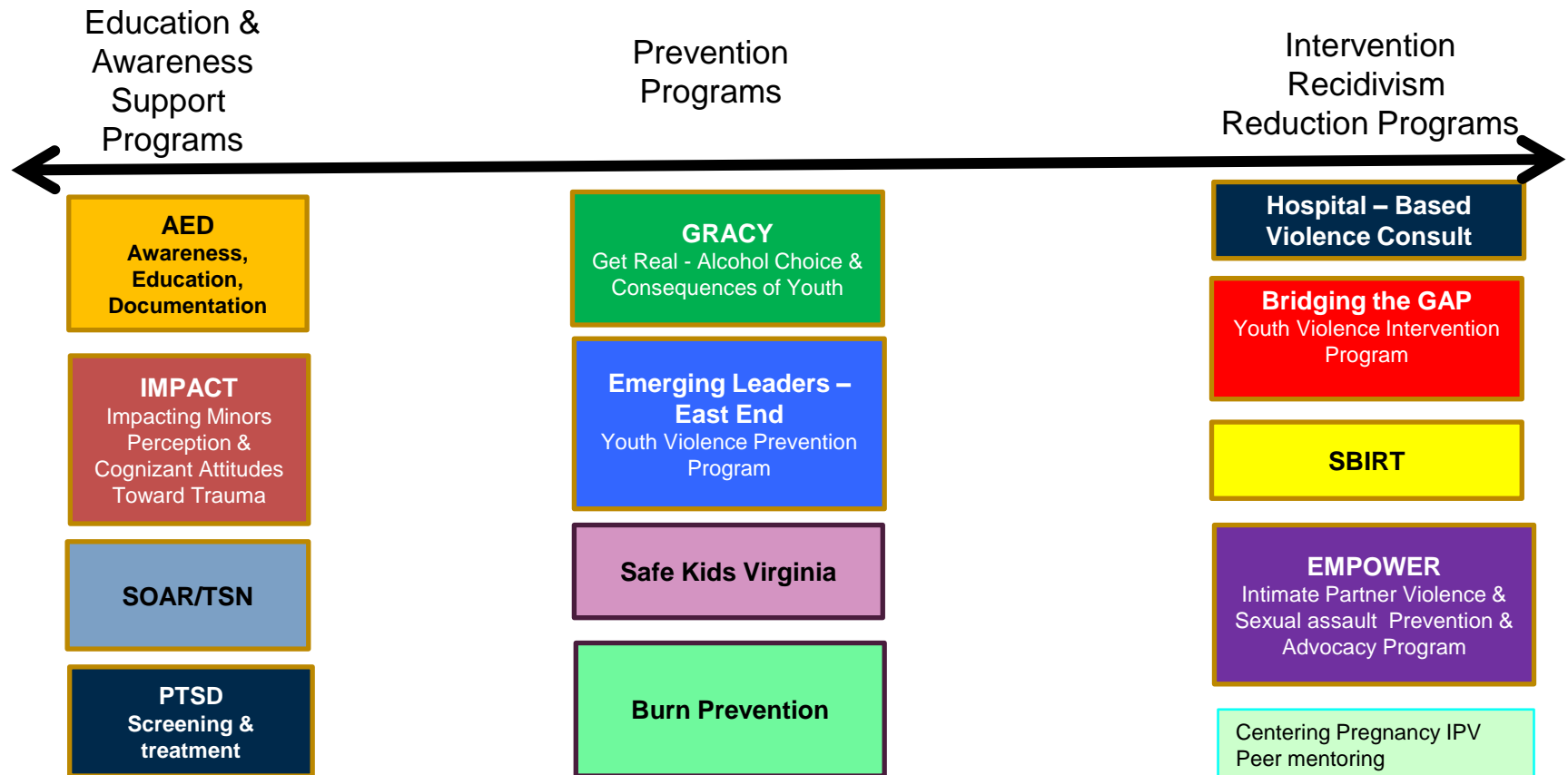
>60
collaborative
workshops

40 educational
programs.



INJURY AND VIOLENCE PREVENTION/INTERVENTION PROGRAMS

Hospital - Community Based



Why Focus on Violence Prevention?



The firearm homicide fatality rate for Richmond youth exceeds state and national rates. ¹

Homicide Firearm Deaths & Rates 2013, 0-24 Years Old

Location	Deaths	Population	Crude Rate per 100,000
Richmond City ⁽²⁾	14	70,476	19.86
Virginia (minus Richmond City) ⁽²⁾	66	2,693,742 ⁽³⁾	2.45
U.S. ⁽⁴⁾	3,897	105,043,525	3.71

Sources:

¹Masho, S.M. & Bishop, D.L. (2015). Trends in Emergency Department Visits for Intentional Injury at Virginia Commonwealth University's Medical Center, 2003-2013. The VCU Clark-Hill Institute for Positive Youth Development. www.clarkhill.vcu.edu (Accessed September 2, 2015).

²Virginia Firearm Death Numbers: Virginia Department of Health, Office of the Chief Medical Examiner. <http://www.vdh.virginia.gov/medExam/Reports.htm>

³Virginia Population Estimates: Virginia Department of Health, Division of Health Statistics. <http://www.vdh.virginia.gov/HealthStats/stats.htm>

⁴Centers for Disease Control and Prevention WISQARS. http://www.cdc.gov/injury/wisqars/fatal_injury_reports.html

At VCU Medical Center's trauma unit, saving Richmond's most gravely injured from the brink of death is a routine miracle



Dr. Michel Aboutanos escorts a gunshot victim up an elevator on the way to surgery.

Life ~~Death~~

Richmond Times Dispatch, Sunday, April 19, 2015



Perspective from the VCU Trauma Center

- 4,300 trauma admissions/year
 - 10-12% - Firearms/stabbings
- Over 75% of all intentionally injured patients in the Richmond area are treated at the VCU Health System
- 95% of assault related injury visits were for youth less than 25 years.
- Five year re-injury rate for victims of intentional injury ranges from 10-50% - (VCU is 20%)
 - 20% die of subsequent violence
-

BRIDGING THE GAP

In-hospital intervention with community case management

Youth Violence Reduction Program for youth hospitalized with violence related injuries

Intervention program

Goal is to reduce recidivism

Channel at risk youth into programs promoting safe behaviors



Legacy Program: Bridging the Gap

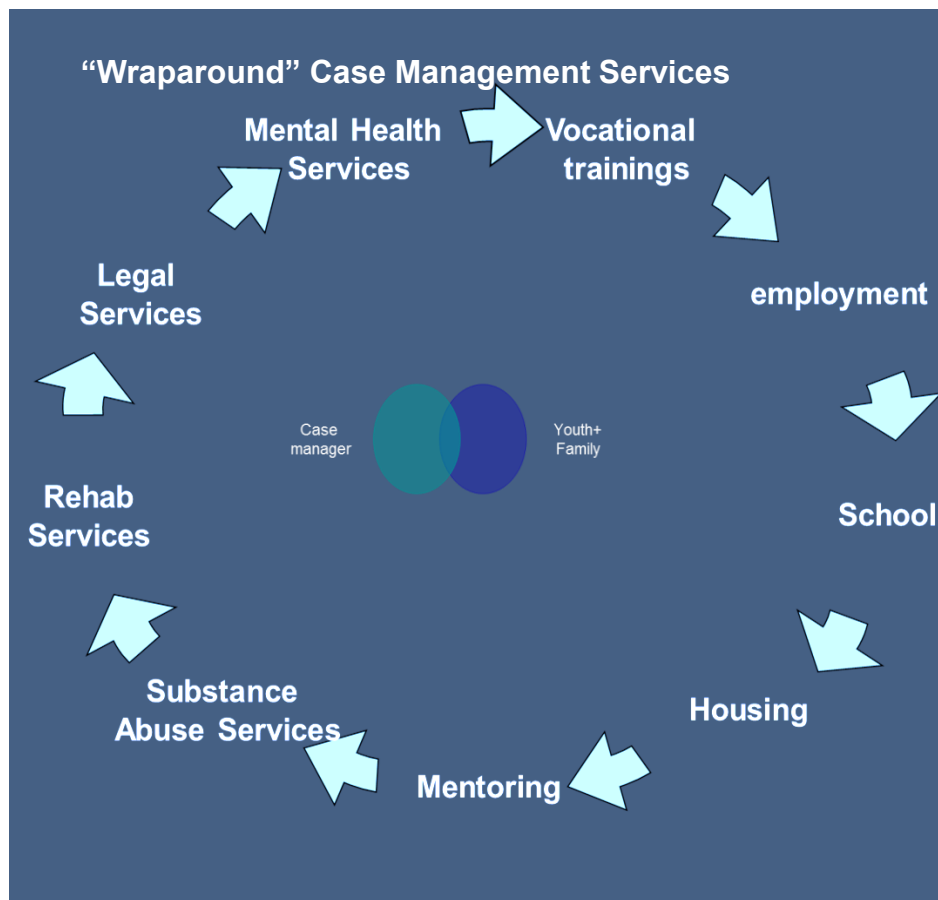
In-hospital intervention with community case management

Youth ages 10-24 hospitalized with violence related injuries

Brief Violence intervention

Case management connects at-risk youth with community-based programs

Goal is to reduce recidivism



Community Services
Substance abuse
Emergency assistance
Recreational
Educational
Vocational
Mental health
Early childhood
Medical assistance
Housing
Workman's comp
Legal
Rehab. Services
Mentoring

What effect does a community-based intervention have when supplemented with a hospital based brief violence intervention to reduce youth violence?



Reduction with short term risk factors

- 2.5x less likely to use alcohol
- Significant reduction in Drug use

Hospital Service utilization

- Clinic Visit: 3.5x more likely to schedule; (92%) compared to historical control (70%)
- ED visits: 2.5x more likely to have an appropriate ED visit

Community Service Utilization

- 2.5 X more likely to access community services at 6 weeks
- 3 X more likely to access community services at 6 months
- > 90% were connected to community service programs within 6 month
- **Recidivism:** < 0.5 % per year (<5 % 2014)

Conclusion

One of the first hospital-community based violence prevention and intervention program comparing a hospital BVI alone to combination of an in-hospital BVI with community wraparound case management interventions

BVI have a unique role in youth violence prevention, especially in terms of enrollment and rapport building

BVI are not sufficient alone

Trauma centers cannot do it alone

The importance of incorporating the community into risk reduction strategies cannot be overestimated

Follow-up

2007 : 1 patient enrolled

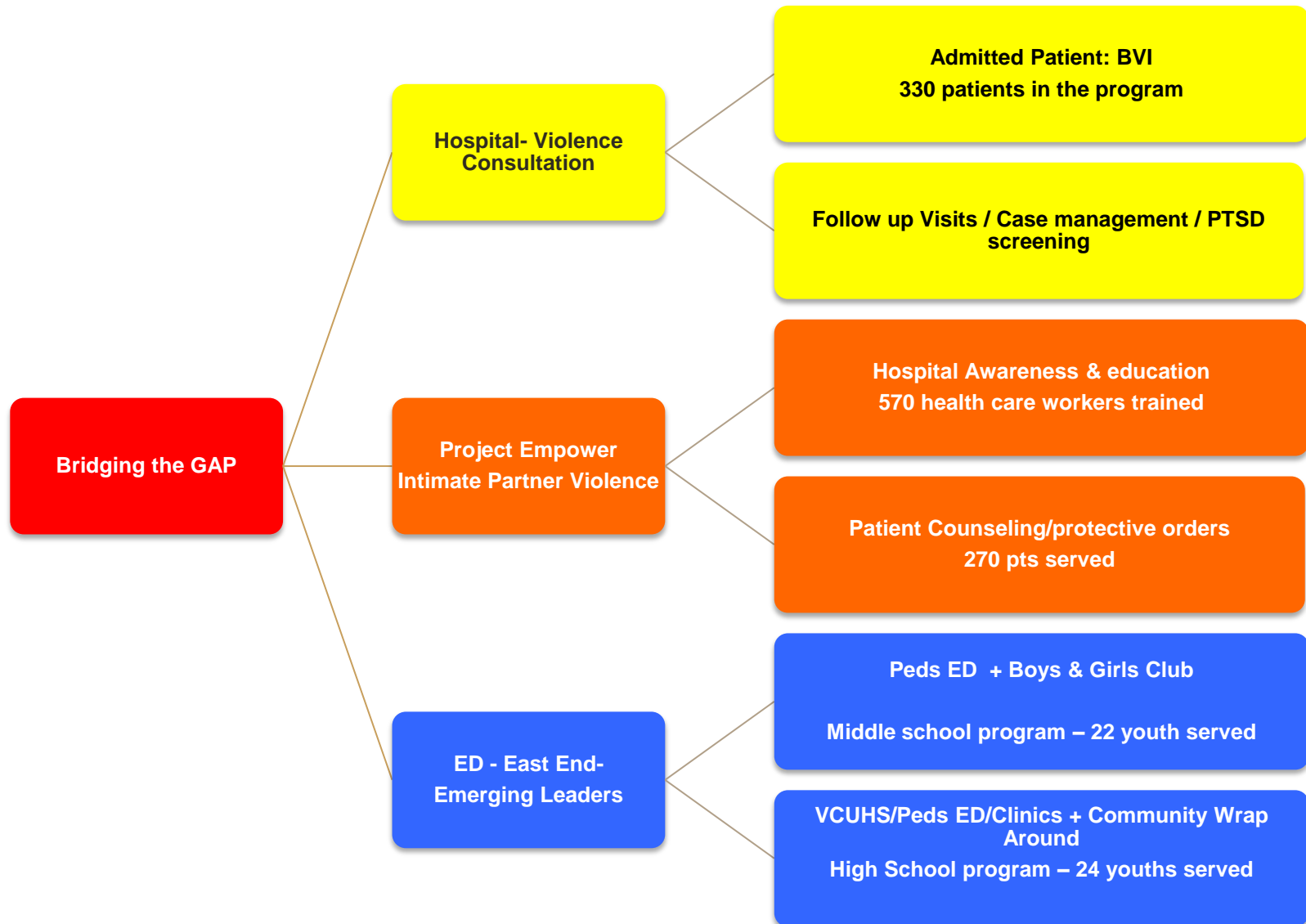
2010 : 70 patient enrolled

2016 : 143 patient enrolled

2014 : BTG became standard of care and all participants were given the BVI + Community Case Management Services!

2015: AAST National Best Model for hospital community based youth violence prevention program

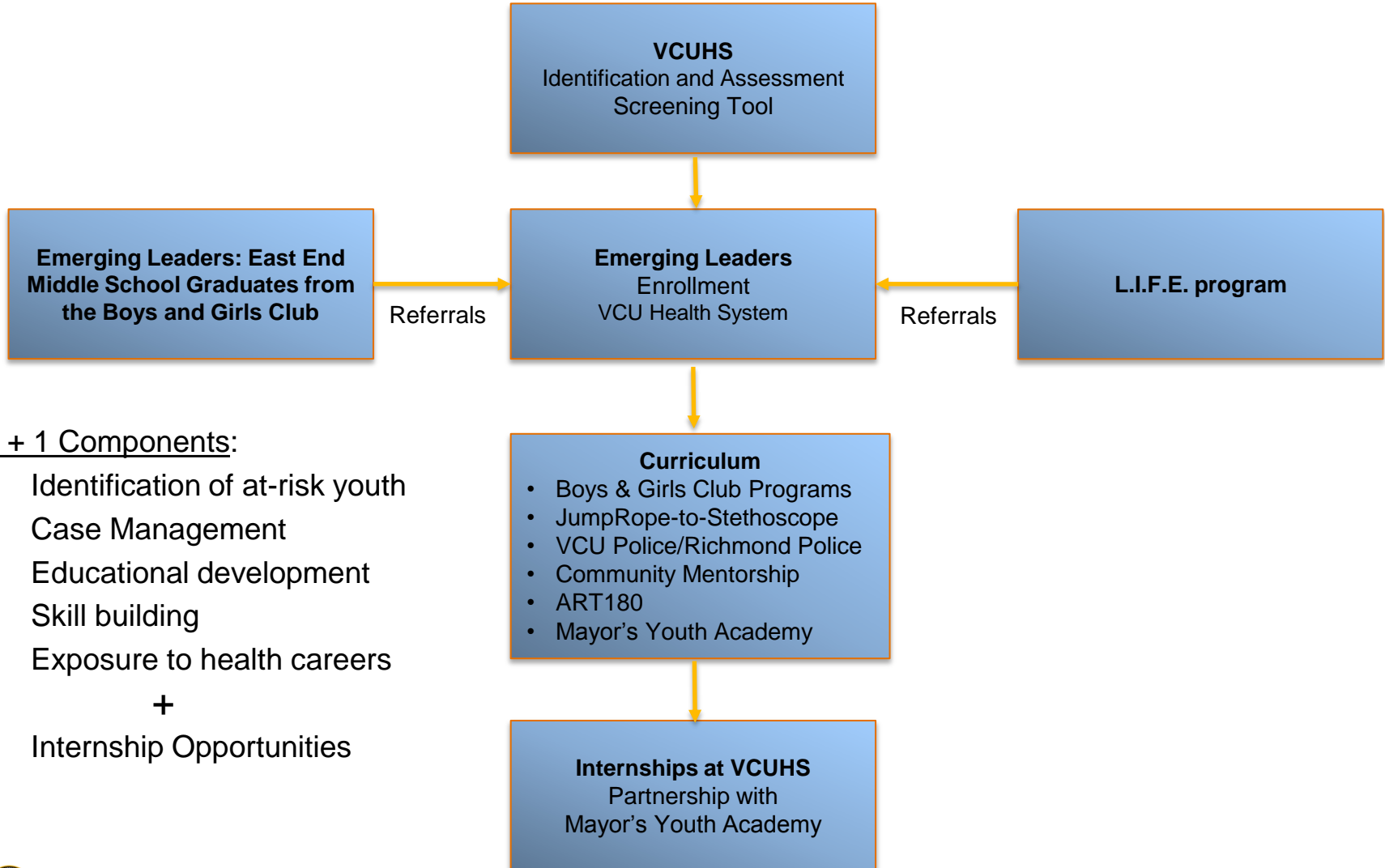
Increase in Hospital: Community Service Needs Project Expansion



Emerging Leaders

High Schoolers - Ages 14-18

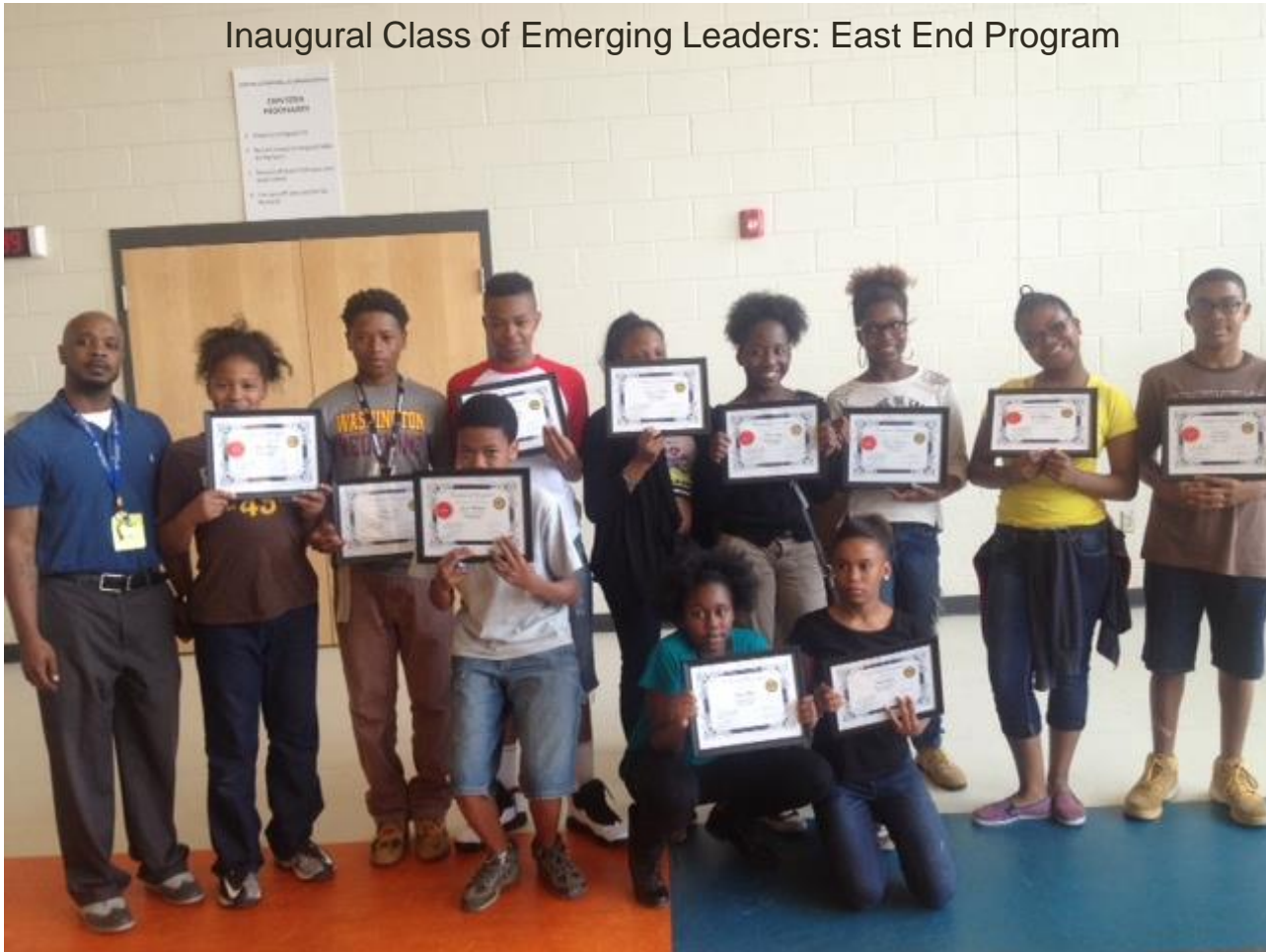
YOUTH VIOLENCE PREVENTION – A Hospital-Community Based Program



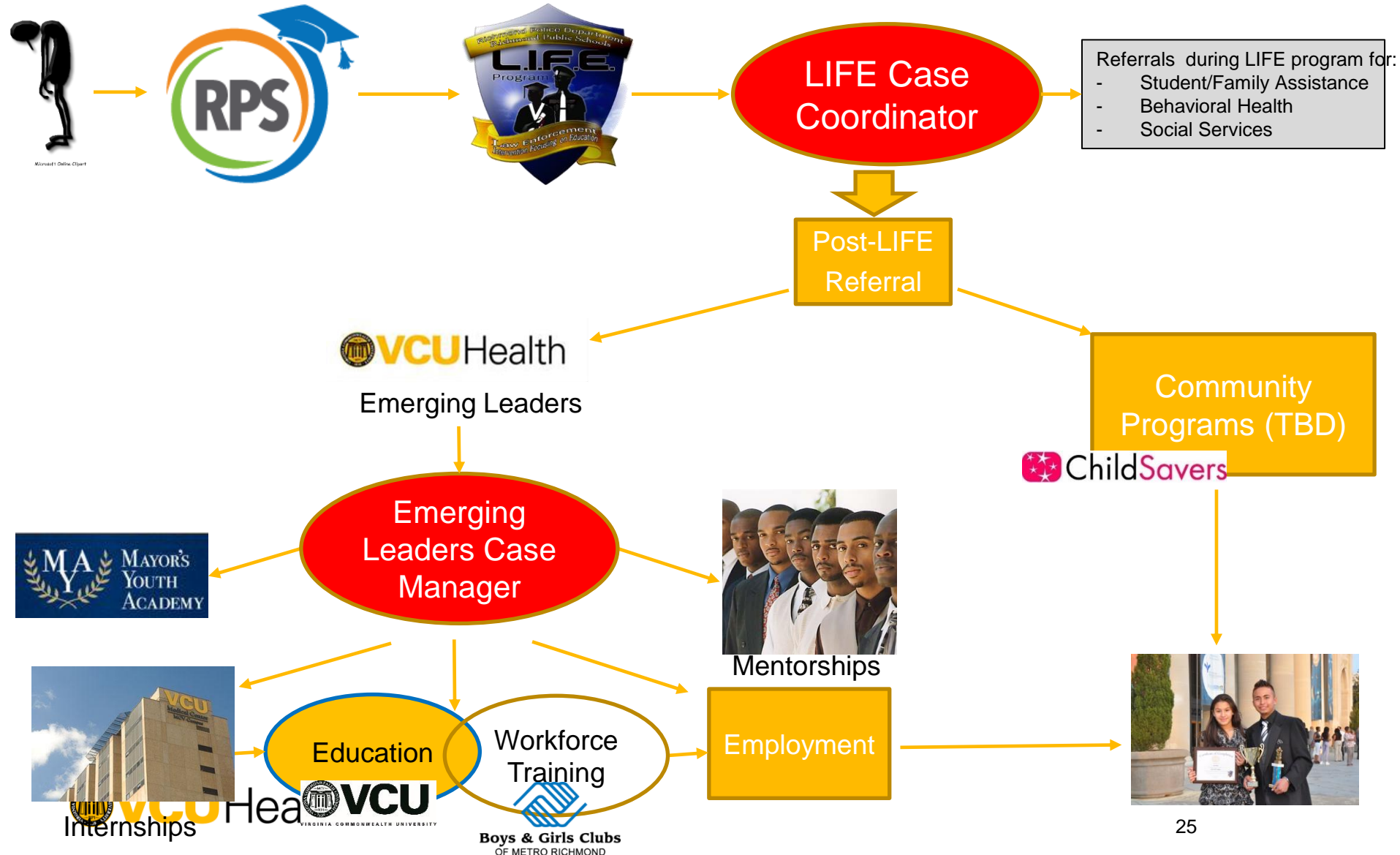
5 + 1 Components:

- Identification of at-risk youth
 - Case Management
 - Educational development
 - Skill building
 - Exposure to health careers
- +
- Internship Opportunities

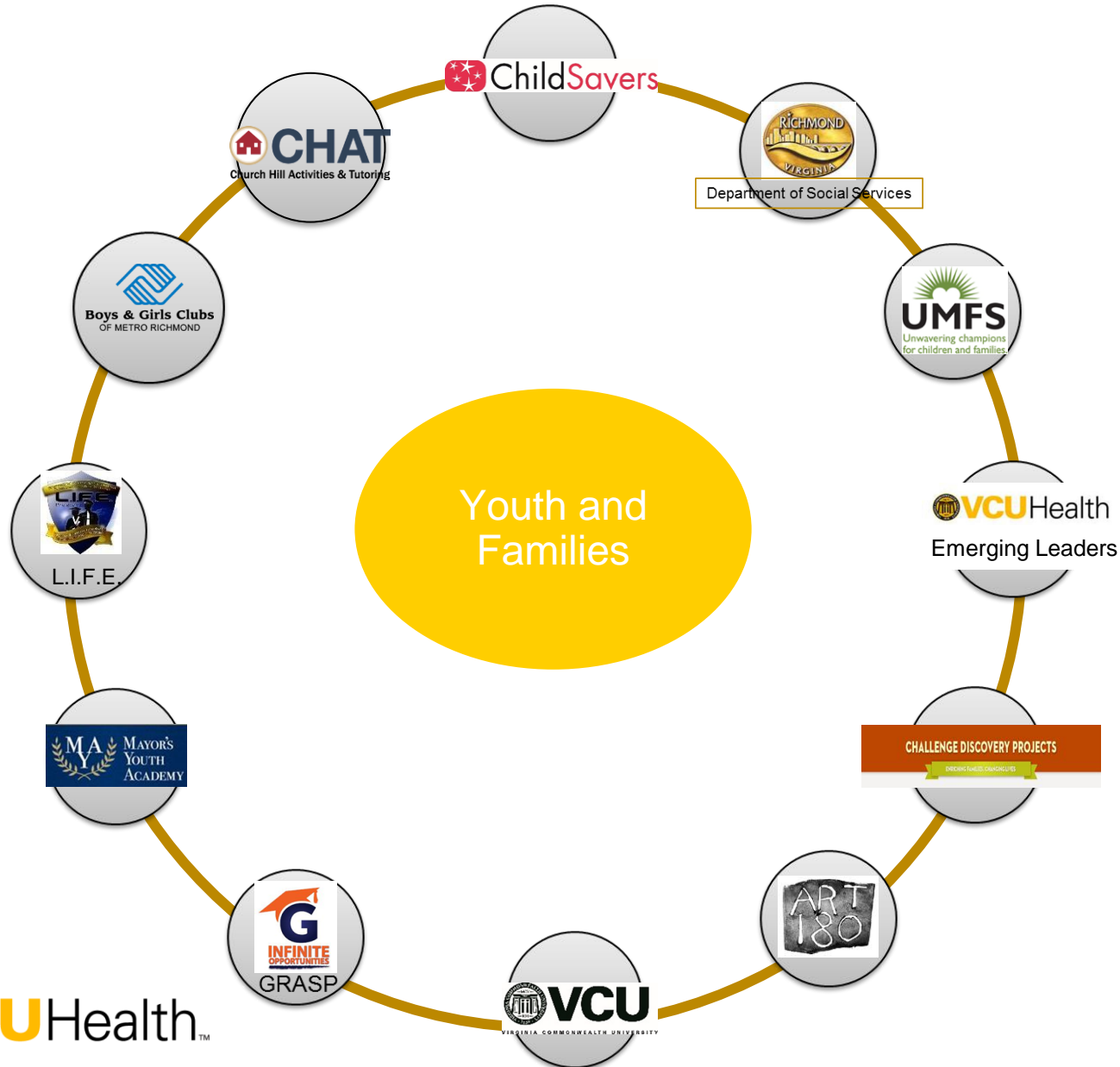
Inaugural Class of Emerging Leaders: East End Program

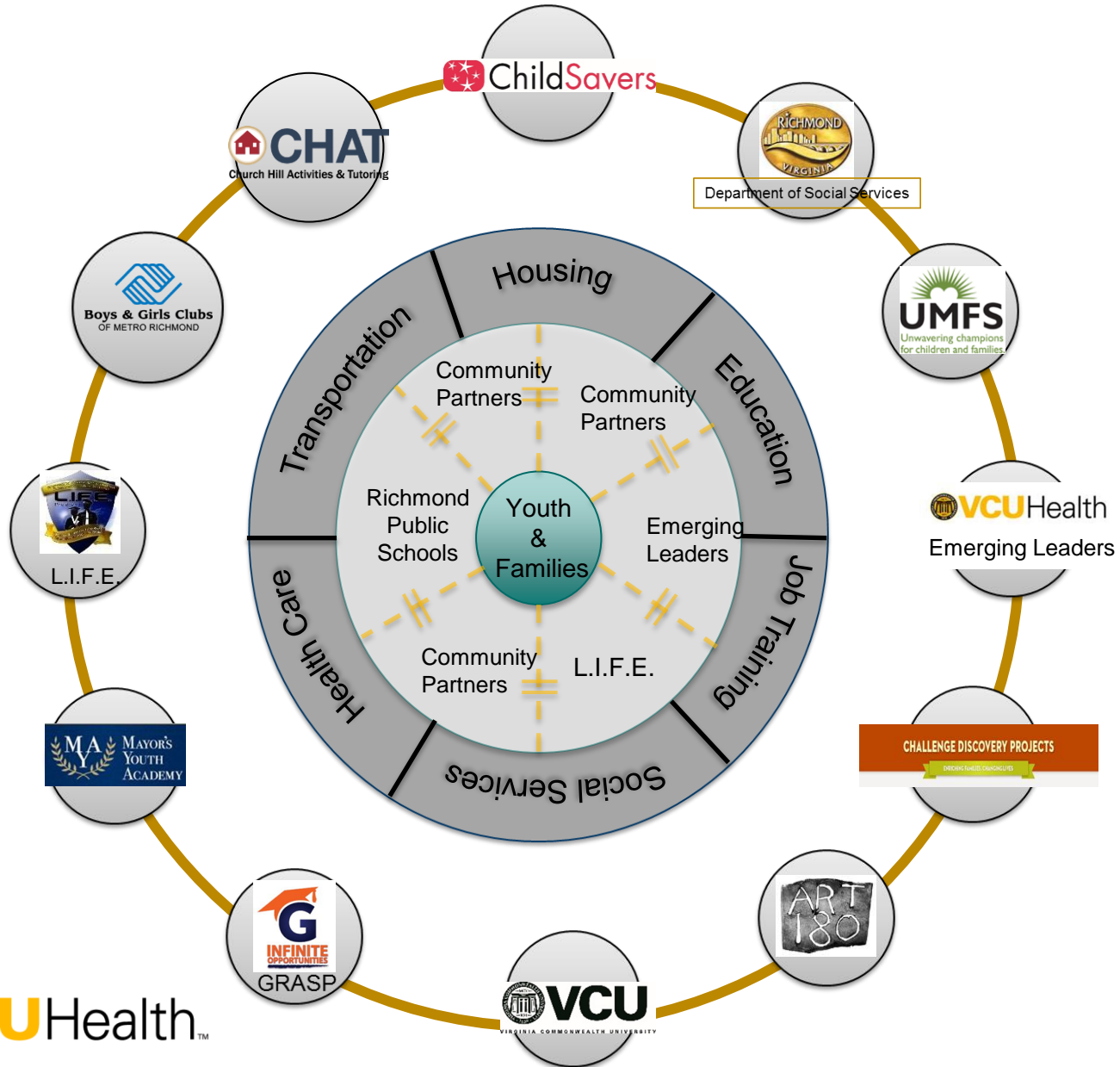


RVA Alternative Pathways Model



VCU Leadership Role : to help align community programs to establish a coordinated system to support youth and families





Program Sharing

Local:

- Hospital-Community wide program awareness initiative
- VCU Medical Center Grand Rounds
- Media / Newsletter / Website/Events

Regional:

- Virginia Chapter of the American College of Surgery
- Virginia State Trauma Oversight Committee
- 32nd Annual State Pediatric Primary Care Conference

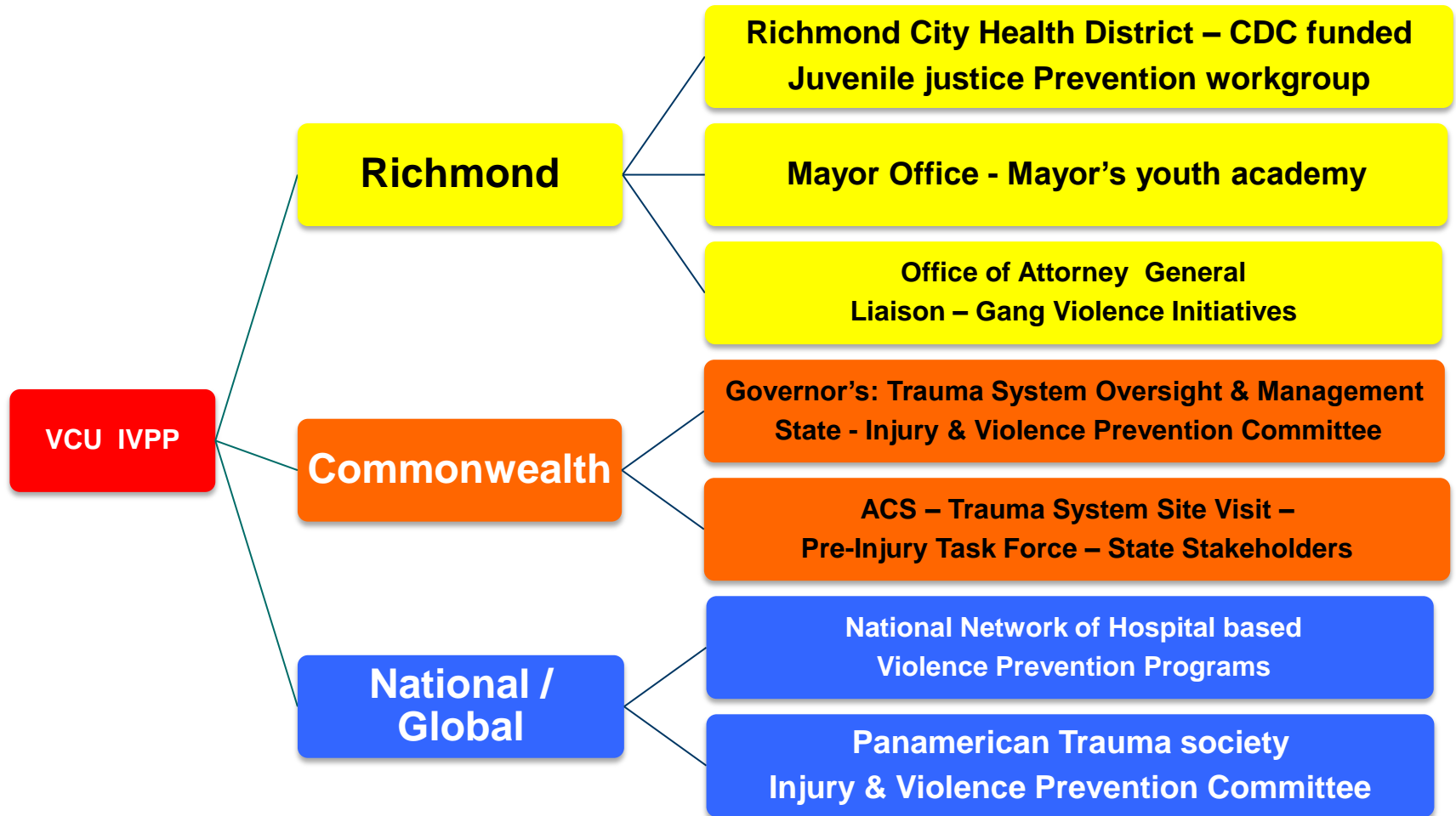
National:

- American Association for the Surgery of Trauma (AAST) national Congress
- Eastern Association for the Surgery of Trauma (EAST) national Congress
- ATS : American Trauma Society

International:

- XI Colombian National Trauma Congress, at the Universidad Javeriana de Cali, Cali, Colombia, June, 2010
- Panamerican Trauma Society (PTS) annual Congress
 - Uruguay 2010 ;
 - Paraguay 2011,
 - Colombia 2012,
 - Chile 2013, Panama 2014, Bolivia 2015
- Trauma Brazilian Congress, sao paul Brazil, 2015

Outreach & IMPACT : “....& who is my neighbor”





2009 Inaugural Shining Knight Gala

Recognizing the trauma system at VCU Medical Center & in Central VA

Supports Injury Prevention programs

- All currently grant funded

Supports education and outreach initiatives of the Trauma Center

- Community trauma care

