

A Very Dark Cloud with a Positive Silver Lining
The Introduction and Evolution of The
Pre-Hospital Immediate Care in Sports Training Programme
20 Years and Counting.

The aims of the Pre-Hospital Immediate Care in Sport (PHICIS) programme:

The PHICIS programme has been developed to enhance the knowledge and skills of the field of play practitioners, standardising their approach to the assessment and care of injured and ill athletes.

The course introduces the skills, equipment and competencies required to facilitate the delivery of immediate care to seriously injured or ill athletes. Candidates experience multi-modality positive learning by an experienced faculty drawn from the field of prehospital immediate care, emergency medicine and sports medicine. Candidates are assessed to ensure adequate transference of knowledge and skills to enable them to deliver the care required competently.

The intention of this programme is to deliver a significant improvement in the provision of immediate trauma and medical care to athletes, facilitating not only a reduction in morbidity and mortality, but also achieving rewarding satisfaction for the providers of such care.

Employing Kirkpatrick's modelling¹ on social impact in respect of the Immediate Care in Sport courses reveals a positive benefit of the courses on practitioner knowledge, confidence and application of immediate care skills in the delivery of care to athletes.

Background to the Inception of the Course:

My drive to improve the immediate medical management of injured athletes initially came from tragic personal experience when my brother, Ian sustained a neck and high spinal cord injury while playing rugby. Unfortunately, the severity of the injury was not initially recognised and management sub optimal. This highlighted to my brother (a teacher) and I, both passionate rugby players, the need for improved training in immediate care in sport to enable practitioners working in this environment to be able to deliver effective care for injured and ill athletes. This unfortunate event provided the drive to develop and implement training. Our gratitude goes to the Injured Players Foundation, who have and continue to, most kindly supported Ian, and many other unfortunate players.

Over the following years, it was recognised that rugby union and other contact or collision sports athletes had become stronger and more powerful, particularly at the elite end of the game. In rugby union injury rates per game had risen since the game became professional (Brooks et al, (2005) Epidemiology of Injuries in English Professional Rugby Union).²

As such, there is risk of life or limb threatening injury or medical emergency during match play or training activities. There was limited medical personnel onsite to deal with the immediate care of these players. Typically, training has been attended by the team physiotherapist and matches by the team physiotherapist and team doctor in addition to a paramedic ambulance for some fixtures. These individuals will ordinarily be specialists in sports and exercise medicine rather than immediate care.

The time to the arrival of paramedic crews can be considerable, especially in remote, limited access areas. Stakeholders are in agreement that optimising pitch side immediate trauma and medical care is a cornerstone of an injury risk management programme and there is therefore a well-defined need for doctors, physiotherapists and other health care professionals looking after athletes and teams to be properly equipped with the skills and equipment required to enable the delivery of immediate care at the pitch side, race track, poolside etc. Not only do these professionals need to be prepared for match and event days but also to work at training grounds where a significant number of injuries or medical problems can occur.

The Journey so far:

In 2004 I approached Dr Simon Kemp, Chief Medical Officer at the Rugby Football Union (RFU) to explore the possibility and feasibility of developing a programme for the delivery of immediate care training in rugby union. With great support from Dr Simon Kemp, and colleagues with expertise in Pre-Hospital Immediate Care, Emergency Medicine and Resuscitation (Dr Andy Pountney, Dr Alison Walker and Ms Lesley Whittaker); a pilot course was successfully delivered in Wakefield in April 2005.

From the original design the course has evolved with the help of the candidates and faculty feedback, the steering group and lead faculty members, in particular Dr Mike England, Dr Andy Pountney and Dr Adrian Harris. Not only has the content changed in line with evidence-based practice but the name also. Initially called the Pitch Side Immediate Trauma Care Course (PSITCC), the name changed to the Immediate Care in Sports (ICIS) course to reflect that the course was being adopted by many sports having expanded beyond its original target audience of rugby union practitioners. Since 2017 the course has been known as Pre-Hospital Immediate Care in Sport (PHICIS).

One of the most significant progressions was the development of the online learning resource by senior faculty and topic experts. Candidates worked their way through 15 chapters with interactive questioning at the end of each chapter. The on-line resources have undergone significant upgrades including the addition of skill stations videos, slide sets with audio and Q&A webinars, pretraining to the VARK³ principles of learning. Annually, all the materials are reviewed to ensure they remain current.

The course follows sound educational structure. Candidates are expected to undertake pre-course learning using the on-line text, to enable them to acquire the required knowledge in preparation for the face-to-face days focusing on skill acquisition and application through simulation.

The face-to-face training is delivered through a learner centered approach employing discussions to deliver clarity in knowledge, skill station four stage or scenario-based learning to facilitate skill acquisition and simulation to enable knowledge and skill application.

The programme is designed to encompass the theories of Kolbs³, Blooms⁴, Lave and Wenger⁵, Harden⁶ and Swanick⁷ in learning strategies applied to optimise knowledge and skill retention. The assessment process follows a framework described by Miller et al⁸ in progressing candidates to demonstrate not just “know” and “know how” but can “do” in pressured environments.

It was recognised that as well as the full original course (level 3), there was a need for a shorter course which still delivered training in the knowledge and techniques necessary to deliver lifesaving interventions but omitting the skills and procedures which might be outside the scope of practice of some practitioners. This resulted in the development of a level 2 course which has predominantly been adopted by community sports events. This programme has grown significantly, as well as being delivered through a community programme for all sports including the UK Sports Institute, it is now delivered at several universities and the military. This has resulted in a very busy PHICIS programme:

During the 2024-25 season there will be thirteen level 3 courses, fifteen community level 2 courses, twenty-one university level 2 courses and one military course run, which is run annually, previously at Headley Court and now at Stanford Hall.

Over the years there has also been the development of centres abroad. This includes in Australia, Hong Kong, Japan, Samoa, Singapore and Wales. The great foresight of lead practitioners in these countries, Warren McDonald, Fraser Brims, Lucy Clarke, Mutsuo Yamada, Jo Probert and Prav Mathema have made this possible.

Through collaboration with World Rugby, the PHICIS materials have been used to develop similar on-line resources for both level 2 and 3 Immediate Care in Rugby Courses throughout the rugby world, and with level 1 First Aid in Rugby, are under the leadership of Mark Harrington, Jock Peggie, the Education, Laws and Compliance team and the Immediate Pitch Side Working Group. The Medical Education Managers Isobel Grondin and Joseph Kalanzi, most kindly, with the Regional Training Managers, develop and support the educators and trainers.

The PHICIS programme and the World Rugby Immediate Care in Rugby Courses have been successful in obtaining endorsement from the Faculty of Pre-Hospital Care, Royal College of Surgeons of Edinburgh. This is a most valued assessment and ensures accuracy of curriculum content and the utilisation of sound educational principles for delivery and assessment of competency.

Furthermore, the excellent work by Dr Alastair Nicol has resulted in cross reciprocation between the sport immediate care courses in the UK e.g. Scottish Rugby Union SCRUMCAPS, Football Association ATMIFF, Rugby Football League IMMOPF etc. This equivalence project has been kindly extended to the rugby world by World Rugby through the commissioning of the European Observatoire of Sport and Employment (EOSE).

At the time of this report:

PHICIS certified Practitioners

	Level 2	Level 3
England	4,432	2,217
Wales (ICIR)	64	120
Hong Kong	258	352
Japan	745	106
Singapore		36
Australia	24	194
Samoa	17	

World Rugby FAIR and ICIR Certified Completions:

	Level 1	Level 2	Level 3
Online completions:	116,043	22,026	8,232
Face to face completions:	24,625	6,754	557

All this development and progress has only been possible thanks to the commitment of the administrative teams, in particular Claire Westmoreland-Smith, PHICIS Programme Administrator, and the faculty of instructors/educators and trainers. I am so grateful for their support.

I sincerely hope we continue to grow new faculty members, course directors, and most importantly competent practitioners to provide care for our players and athletes, who have been equipped with the required knowledge, skills and confidence.

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*The PHICIS programme and its outcomes are dedicated to
Ian Smith for his bravery and wisdom.*

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