

Somewhere in France (9 April 17): a centenary review of medical arrangements at Vimy Ridge

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SUMMARY

In April 1917, medical units of the 4 divisions of the Canadian Corps combined for the first time in support of a single action, the assault upon Vimy Ridge. Detailed planning, infrastructure development, information dissemination and rehearsal were features of preparations by the combat arms and medical elements of the Canadian Forces. Extraordinary coordination resulted in the rapid rescue and evacuation by Canadian medical services of 8000 casualties over 4 days. Characteristics of today's military medical services are evident in the work of the Canadian Army Medical Corps 100 years ago.

Successful Canadian actions at Vimy Ridge and Hill 70 book-ended the Battle of Arras, a major component of the 1917 Nivelle Offensive of the First World War. Their impact was greater in Canada than Europe, with the Battle of Vimy Ridge, in particular, being considered a nationally defining moment. Although some historians consider the claims of today to be exaggerated, the achievements of the Canadian Corps were recognized for the remarkable feats that they were at the time. Had the Nivelle Offensive been successful in its goal to break the German line, these Canadian actions would be remembered as the turning point in the war. The equally remarkable success of the Canadian Army Medical Corps in these battles is the subject of this essay.

France's Tenth Army had failed to dislodge the Germans from Vimy Ridge on several occasions in 1915, suffering 150 000 casualties, many of whom remained in no man's land. The British XVII Corps relieved the French in February 1916. The Canadian Corps arrived in the sector in October 1916. The 3 divisions of the Canadian Corps had been joined by the 4th Canadian Division in August 1916 at the Battle of the Somme. The Canadians had since become adept at raiding German lines, mostly at night, to harass the enemy and capture intelligence. In March 1917, the 4th Division launched the most ambitious raid yet. Combining stealth and gas, they sought to prove their worth to their veteran colleagues by attacking German trenches on Vimy Ridge. The result was disastrous. The casualty rate was 43%, or 687 men. Survivors remembered it as "a proper slaughter."¹ Combined with the withering losses suffered at the Somme, it put the Canadian Corps at risk of collapse. In March 1917, the Canadian Corps received orders to take and hold Vimy Ridge.

The hallmarks of the Corps' strategy were meticulous planning, information dissemination, infrastructure development (e.g., communication trenches and attack tunnels), rehearsal and flexibility, all new to the war. Sir Julian Byng, Corps commander, and Arthur Currie, commander of the 2nd Division, are credited with the innovations. No longer would men be left without objectives because their captain had been hit: they could outflank machine guns so long as they did not lose contact with their unit; attacks were coordinated to follow creeping artillery barrages in order to deny the enemy time to reset their machine guns. Uniquely these strategies were rehearsed by units in models of their sector. Medical arrangements for the battle used similar strategies to correct errors of the past. Crucially combat troops were ordered not to stop for injured comrades and were assured of aid by special teams during the battle.

Twelve of Canada's 16 field ambulance units were deployed in the Battle of Vimy Ridge. Field ambulances were the favoured destination for medical students from Canadian universities who volunteered for service, interrupting their studies. Famous examples include Frederick Banting, Norman Bethune and Harold Griffith (pioneer anesthesiologist).^{2,3} Even though each unit was attached to 1 of the 4 Canadian divisions, they pooled resources to form a central trunk supporting each unit as a branch. Most of the field ambulances were tasked with "clearing the field" and maintaining an advance dressing station.⁴ Upon receiving instructions, each unit surveyed its sector and prepared structures including the advance dressing station, field ambulance relay posts, accommodation for stretcher bearers and regimental aid posts.⁴ Roads leading to Vimy had 3 lines of traffic to accommodate the buildup to the battle, and still medical units had difficulties receiving materials and supplies. For divisions 1–3, stretcher cases were taken to a Corps dressing station at Les Quatre Vents while the walking wounded went to Villers-au-Bois. The 4th Division was separated from the rest of the Corps by topography and took stretcher and walking casualties

to la Haie and Hersin-Coupigny, respectively. Efficient and effective evacuation was the priority of the medical services close to the front. The No. 1 Canadian Casualty Clearing Station, the first point where surgery could be performed, was placed at Aubigny, and a motor ambulance convoy was stationed at Bruay. Tramlines were constructed to move casualties along lines of evacuation that would otherwise have become impassable owing to mud (Fig. 1). Improvised stretcher cars were moved by men or mules. The tramlines converged at Ambulance Point, from where the Army controlled evacuation of casualties out of the area of operations.

At 5:30 am on Easter Monday, Apr. 9, 1917, pipers with the Princess Patricia's Canadian Light Infantry Regiment of the 3rd Canadian Division struck up their bagpipes as their men, with the rest of the Canadian Corps, entered no man's land, chasing the artillery barrage up the Vimy hillside. It is doubtful if the Germans or even the Canadians heard the pipes, such was noise of bombardment. The pipers were there because their main role was as stretcher bearers and they followed the first line of men out into the field of battle. Fighting was fierce. Lance Sergeant Ellis



Fig. 1. Canadian medics, aided by German prisoners, move 4 casualties on an improvised stretcher car along tram lines during the Battle of Vimy Ridge, April 1917. (Library and Archives Canada: MIKAN 3194779).

Sifton from the tiny town of Tyrconnell, Ont., made it into a German machine gun dugout. He first kicked over the machine gun and then attacked its crew with his bayonet before being killed. He was posthumously awarded the Victoria Cross — 1 of 4 awarded to Canadians for their efforts that day.

By dark, it was clear that the assault had been successful even though fighting continued for 4 days. Remarkably the field was cleared of casualties by midnight. The rapidity with which the injured were rescued taxed the lines of evacuation considerably. Rain and then snow worsened the situation. MacPhail⁴ blames the back-up on delays removing treated casualties out of the area of operations — an Army rather than a Medical Corps responsibility. This may be reasonable, as all transport was requisitioned temporarily to resupply the combat units. Telephone communication remained open to the front lines throughout the battle. Frantic calls eventually resulted in 2 additional roads being opened followed by rapid clearance of casualties. By 2 am on Apr. 10, 5976 patients were safe in casualty clearing stations, warmly housed at Les Quatre Vents, or evacuated.⁴ In the 4 days of fighting Canadian medical services looked after 4265 stretcher cases and 3791 walking wounded, including 706 enemy casualties. Fit German prisoners assisted the medical crews, with only casual guarding apparent.

Field ambulances today are responsible for North Atlantic Treaty Organization (NATO) Role 1 care, treatment at the point of injury and evacuation.⁵ The organization, priorities and actions of the Royal Canadian Medical Service today can trace their origins to Vimy, where for the first time brigade and divisional medical resources were pooled in a great scheme of coordination. Rapid rescue from the point of injury, with effective primary care, remains the priority of the service. Senior medical officers today will sympathize with their Vimy ancestors when lines of supply or evacuation are threatened by the priority they receive from

centralized transport. Cooperation between echelons of care, today defined by NATO but based on those used in the First World War, remains the basis for achieving the goal of ameliorating the injuries of war.⁵

The feat achieved by the Canadian medical services parallel that by combat arms at the Battle of Vimy Ridge. From today's perspective, both are unfathomable. Victory at Vimy was celebrated in Canada and recognized by the authorities. Arthur Curry was knighted in the field by the King and given command of the Canadian Corps, itself a recognition of Canadian self-sufficiency. Curry would revise higher command's mission to take the town of Lens into a successful repeat of Vimy Ridge at Hill 70, where he drew German forces into a terrible slaughter. Byng was given command of Britain's Third Army and was elevated to the peerage as Baron (later Viscount) Byng of Vimy. He served as Canada's twelfth Governor General. An impromptu memorial at Vimy was replaced in 1936 by Canada's iconic monument to the bravery, sacrifice and savagery of war.

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